The American Artisan

THE HARDWARE RECORD

Vol. 46—No. 9. CHICAGO, AUGUST 29, 1903. $2.00 Per Year.

COLUMBUS BOLT WORKS
COLUMBUS, OHIO.
Write for Our General Catalog "C."

PURE ASPHALT ROOFING

Never Dries Out or Cracks Our Tarred Ready Roofing, Sisters' Felt, Building Paper, Roofing Cements, Paints, Etc. WRITE US FOR PRICES.

J. L. PERKINS & CO., 235 Lake St., CHICAGO.

Never Will Leak . . .

American Seal Elastic Oil cement will not get hard—always stays elastic.

Stops leaks in any roof—old or new, and will wear for years. Fix up the roof now and stop the leakage—in money and roof.

Use it on new work for jointing and 'round your skylights—follow it with a coat of American Seal Roof Paint—the best made—and the top of your house is safe for years. *Prices for the asking.*

THE WM. CONNORS PAINT MFG. CO.,
TROY, NEW YORK.

WESTERN AGENTS Dept. A. | J. L. Perkins & Co., 235 Lake St., Chicago. | Stockhoff Supply Co., 107 North Main St., St. Louis.

THIS SPACE FOR SALE
Inquire of Owner
Daniel Stern, 69 Dearborn St.
CHICAGO.

TINNERS FIND EMPLOYMENT

By advertising and using THE POWERS AUTOMATIC CHIMNEY TOPS

They make chimneys draw, give tinners employment making stocks, and give the dealers profit

Sold by Hardware Jobbers and Dealers

Made only by **POWERS BROS.** STERATOR, ILL.

This cut free to dealers.

OSGOOD STANDARD SCALES

are used by the most careful weighers in the country. All kinds, sizes and capacities.

"Osgood on the Beam"

is a guarantee of correct weight. Send for catalogue N today. We believe we can save you money

Osgood Scale Company
Binghamton, N. Y.

WE MAKE

Stove, Tire and Carriage Bolts—Rods, Rivets, Machine Screws, Nuts, Hinge Pins and Special Bolts, Screws and Nuts of all descriptions

THE ATLAS BOLT & SCREW CO.
Cleveland, O.

Crying—to—do—business—without—advertising—is—like—winking—at—a—girl—in—the—dark;—you—know—what—you—are—doing—but—nobody—else—does.

Black Diamond Files and Rasps

PERFECT—ALWAYS

Twelve Medals Awarded

At International Expositions

G. & H. BARNETT CO.
Black Diamond File Works, PHILADELPHIA, PA.

Nicholson File Co.

GENERAL OFFICES: PROVIDENCE, R. I., U.S.A.

Manufacturers of

FILES and RASPS

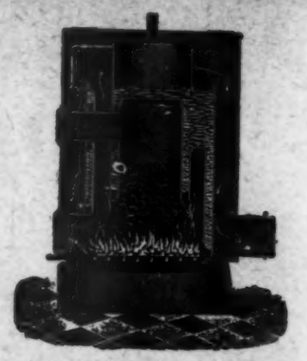
NICHOLSON, KEARNEY & FOOT, ARCADE, AMERICAN, GREAT WESTERN, McCLELLAN, EAGLE, J. B. SMITH, "X. F." GOLD MEDAL

GENEVA TOOL CO. Hand Agricultural Tools, GENEVA, OHIO.

One new plant; increased facilities all around, twelve warehouses, mean the promptest shipments possible of IDEAL Boilers and AMERICAN Radiators this season.

AMERICAN RADIATOR COMPANY

LAKE AND DEARBORN STREETS, CHICAGO



"DEFENDER" STEEL BOILER

For Steam and Hot Water Heating Surface Burner. For Soft and Hard Coal. Portable and Brickset.

Kewanee Boiler Company, Kewanee, Ill.

167 E. LAKE ST., CHICAGO.

St. Louis Office, 518 Bank of Commerce Bldg.

Sperry's Steam Kettles

Made from very thick metal, without Stay Bolts, Joint packed in such a manner as to never need repacking. A little higher priced than some, but they are safe and tight.

D. R. SPERRY & CO.,

HOLLOW-WARE FOUNDERS

...BATAVIA, ILL.

"THE ILLINOIS"

Sold in Every State

Have Stood the Test of Years.

METALLIC SKYLIGHTS

Made in 10 Styles and 500 sizes.

"THE ILLINOIS" are the best skylights made. We also manufacture Cornices, Finials, etc. Send for handsome illustrated catalogue. Ribbed skylight glass furnished at very lowest prices.

J. H. JONES & SON, Mfrs.,

Look Box 33. STREATOR, ILL.

MAYER & COMPANY

B. G. I.

The Tomlinson Cleaner

Is the most satisfactory means of thoroughly cleaning a shot gun ever invented. It will absolutely remove rust spots and keep a gun in perfect condition. Will fit any standard rod and any gun. The Tomlinson is cheap at $1.00 for it will last a lifetime with proper care. New wire sides furnished.

BRIDGEPORT GUN IMPLEMENT CO.,

Agency 313 Broadway, New York City, N. Y. BRIDGEPORT, CONN.

FREE EDUCATION IN ROOFING

Send for illustrated booklet if you want to know all about all kinds.

CORTRIGHT METAL ROOFING CO.

Philadelphia and Chicago.

PETERS AMMUNITION

Peters Factory Loaded Shells Is the most complete line of Shotgun Ammunition on the market.

Loaded with all the standard bulk and dense smokeless powders, semi-smokeless and black powder, fulfilling every requirement of the sportsman at the trap or in the field.

Peters Cartridges Hold the World's Records in Rifle, Revolver and Pistol Shooting.

Eastern Department: 98 CHAMBERS ST., NEW YORK, T. H. Keller, Manager.

HIBBARD, SPENCER, BARTLETT & CO., Chicago, Ill.
CHARLES G. GRUBB, Pittsburg, Pa.
F. B. CHAMBERLAIN & CO., St. Louis, Mo.

THE PETERS CARTRIDGE CO.

CINCINNATI, OHIO.

The Forests ARE Full of Oaks

SCRUBBY OAKS, MEDIUM OAKS, GREAT OAKS

AND IN EVERY FOREST ONE GIANT TOWERS ABOVE HIS FELLOWS

Stovedom like the forest is full of Oaks. There is one Oak that towers above its fellows and that is

WHITE'S OAK

BETTER THAN EVER FOR 1903

The base is cast in one piece. It embodies every up-to-date feature of stove construction. It will pay you to secure the agency.

WRITE FOR CATALOGUE

THOMAS WHITE STOVE CO.

QUINCY, ILL.

Moore's Stoves Always Please

Moore's Fire Keeper

Air-Tight
Ground Joints
Guaranteed to burn
Any Kind of Coal
And hold fire 48 hours
Perfect Ash Pan
Another one of the

EASY LINE TO SELL

JOLIET STOVE WORKS,

JOLIET, ILLINOIS.

HOLBROOK, MERRILL & STETSON, San Francisco, Los Angeles, Sacramento.

Sunshine Heaters

The Ne Plus Ultra

of heating stove construction is reached in the unrivaled Sunshine line.

Their Beauty,

Their economy of fuel,

Their durability have placed them in the front rank of heating stoves

The Completeness

of the Sunshine line makes it a most profitable one for the dealer. We can say confidentially that whatever the climate or character of your locality, Mr. Dealer, the Sunshine line can supply you with exactly the heating stove that will distance all competition.

WRITE FOR CATALOGUE

John Kontny

153-159 SOUTH JEFFERSON ST.

CHICAGO

Western Agent for READING STOVE WORKS, Reading, Pa.

"Shoemaker stick to your last."

"Keeping everlastingly at it" has enabled us to produce this Remarkable Range and sell it at an extremely attractive price.

Sheet Flue, Six Holes, Smooth Castings, Good Weight. It is First-class Throughout.

Mr. Dealer, you can retail the 20x20 oven size of this Range with Pipe Shelf at $25.00 and make more than usual profit.

In the race for supremacy and the trophy of "Good Business" it shows remarkable speed before strong "Trade Winds" and is a "Wonder" in the shifting and variable breezes of the "slow" season.

Those who sail this craft need not worry about the chance of "A slip between the cup and the Lip"-ton.

You can place your "Reliance" in THIS.

THE PITTSBURGH STOVE & RANGE CO.
PITTSBURGH, PA.

Good Luck Stoves
TUTTLE-ALLEN STOVE CO.
Kansas City, Mo.

A customer in the Store is worth a crowd in the street. Popular Prices bring them in.

Cinderella Stoves
W. D. SAGER,
Chicago, Illinois.

ROYAL OAK

THE MONARCH OF THEM ALL!

THIS up-to-date Oak Stove is the latest production on the market made in the newest and most modern stove foundry in America. Embodies practical ideas of skilled labor. Having every labor-saving appliance and modern equipment we challenge competition. The **Royal Oak** has XXth Century Ornamentation and is absolutely air-tight and the price—well if interested write to us and learn a thing or two about our Steel Ranges, Steel Cooks and Hot Blast Heaters. : : : : : : : : :

ROYAL STOVE & RANGE CO.
GREENVILLE, OHIO

Makers of the Most Modern Stoves in the Newest Stove Foundry.

MALLEABLE MENTION

CHICAGO FAULTLESS MALLEABLE STEEL RANGES

TRADE MARK

No. 5 *A Little Journal Devoted to a Big Subject* 1903

THIS PUBLICATION is the general salesman for the Faultless Malleable Steel Ranges; now made at 617 Austin Ave., Chicago, and soon to be made at our new malleable foundry at St. Charles, near Chicago.

MALLEABLE STEEL RANGES never break in shipping, heat more quickly, last longer and are easier to sell (as a strictly first-class article) than ordinary ranges.

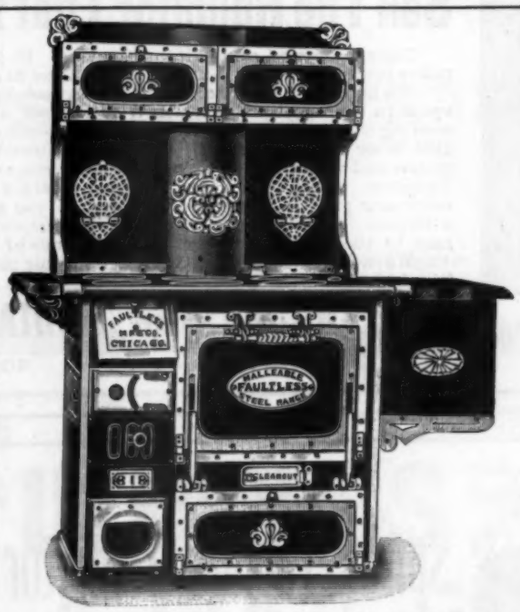
EVERY MERCHANT who is endeavoring to add each possible fifty-cent piece to his profit account should read, consider and act upon the information given in this little journal.

THE BUILDERS OF THE FAULTLESS are endeavoring to do the right thing, at the right time, in the right way; to make Malleable Ranges better than they were ever made before; to eliminate errors; to know both sides of the question; to anticipate requirements; to get next the merchant; to have as many Faultless Ranges as possible shouting their good qualities where used by pleased householders; in a word, to make a "Faultless" Range.

FOR EACH $5,000 you buy of traveling men you pay into salary account of the "other fellow" not less than five hundred dollars in cash.

A GOOD MALLEABLE RANGE costs the dealer about six dollars more than the same grade Range would cost if made in gray iron. Can six dollars be invested to any better advantage?

THE FAULTLESS CAST ENAMELED RESERVOIR (sent only when especially ordered) is much larger than the Cast Reservoirs commonly used in highest grade cast Ranges and has a capacity of six and one-quarter gallons.



Merchant's net cost price of No. 818 as shown in cut

$42.28

Merchant's net cost price for Range without reservoir

$36.58

NO EXTRA CHARGE FOR "GUN METAL" FINISH OR POUCH FEED.

DEAR SIR: If you can use the best Malleable Range on the market, we can save you big money if you order direct by mail. Of course you must first learn from personal inspection what the Faultless is like. If there is no Faultless Agency in your town and you order sample now, we will **refund to your customer** our profit on this one Range. Here is our plan in detail:

When you have sold the range at regular retail price, reporting to us when you pay for Range name of your customer and date of sale, we will promptly pay back TO YOUR CUSTOMER Four Dollars and Fifty Cents.

EXAMPLE: No. 818 Square Range with High Closet (we don't make high shelves) would cost you $36.58 plus freight (no breakage on malleables). You sell this Range for $50.00, making about THIRTEEN DOLLARS profit on your sale. No doubt you know it's easier to sell a Fifty Dollar Malleable than it is to sell a Thirty Dollar ordinary.

NET RESULTS: The Dealer completes a profitable deal, maintaining his regular price. The Buyer gets the Range at about wholesale price. The Maker loses his profit on one Range but gains two friends, viz., the Dealer and the Buyer. Is it worth the price?

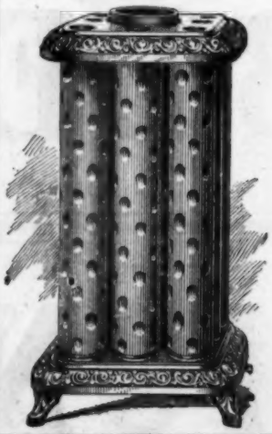
This offer is good only for present acceptance from towns where no Faultless Agency has been established and applies to the Faultless Malleable Steel Range only.

THE QUICK HEATING COPPER RESERVOIR in the Faultless Range contains 77 pints which is within three pints of **ten gallons.** The Faultless Reservoir is securely anchored to the socket in the body of the Range, and is the quickest heating and most satisfactory Reservoir on the market.

GUN METAL FINISH means in every day English, Wellsville Polished Steel, and that's the material used in Faultless Ranges. Our customers don't call for "Japanned" Ranges—say they peel and look like "old campaigners" in a few months.

FAULTLESS MFG. CO., 617-621 Austin Ave., CHICAGO, ILL.

No rebate given unless order mentions advertisement in American Artisan, dated August 29, 1903.



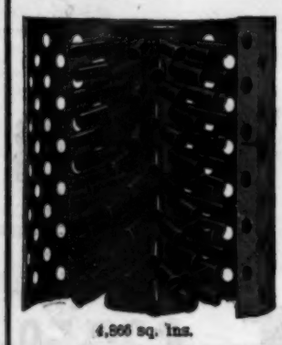
SPECIAL TO THE TRADE

What better proposition can you offer a man than to save half his fuel? **New Era Radiators** will do it, and are now made in styles, sizes and prices to meet the requirements and circumstances of everybody who has a house to heat, whether they use stoves, a furnace, or a steam or hot-water system.

Our method of placing a Radiator in the celler and stopping the enormous waste heat from a furnace or boiler, without the objectionable feature of running a smoke pipe through the house, is worthy of investigation.

If you have never sold Hot Air Radiators, or have handled some other kind, it will pay you now to make inquiries about **New Era Radiators.**

WILMOT CASTLE COMPANY, ROCHESTER, N. Y. 77 ELM STREET



4,866 sq. ins.

The Part that Does the Business.

Sell The Radiator That Radiates

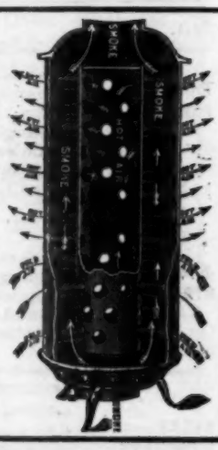
Take a common sense view of heating. If you wish to heat a poker you hold it OVER the fire, not at the SIDE.

We hold 96 to 120 pokers over the fire, each having a hollow air space in center, through which a current of air rapidly passes, sending the heat to all parts of the room, getting results which no DRUM or SIDE HEATER can give. Advertised in 82 family papers and magazines, bringing 18,000 inquiries about the Rochester Radiator. Those from YOUR town are referred to YOU while you carry our goods. Thus we sell them to you and then sell them FOR you. A postal will bring you full description and proofs from men in the trade who have sold thousands of them.

We will remember you with a Souvenir later, watch out for it. Address

ROCHESTER RADIATOR CO.,

No. 120 Furnace St., ROCHESTER, N. Y.



CUT No. 4.

COLE'S Spiral Tubular Radiator

Heats a room without any cost for fuel, thus saving each purchaser $15 to $20 in fuel each winter.

Can you use a better argument for the sale of an article which you can sell at a handsome profit at from $2.50 to $3.50?

Made only of the finest grade polished steel, in two sizes. For any size pipe. Can be used on any heating stove, cook stove, range or furnace, burning any kind of fuel.

WRITE YOUR NEAREST JOBBER OR DIRECT TO US FOR PRICES

Cole Manufacturing Co.

3218-3238 So. Western Ave.
CHICAGO, ILL.

The Champion Hot Water Combination Heaters

They Fit Any Furnace

Base section when used without ring sections,

Ring section

These Heaters are made in five sizes diameter, and from 100 to 700 square feet radiation capacity.

Will heat those cold rooms or an addition to the building. Will increase the capacity of any furnace. Are cheaper than coils and will do more work.

Write for new circular. Manufactured by

FRANK D. STOLZ
156 Webster Ave., CHICAGO, ILL.

Louis O. Schuetz, Evanston, Ill., writes:

"I thank you very much for putting my ad. in THE AMERICAN ARTISAN. I have a man now, and would like to have you cancel the ad., because we are getting letters from all parts of the country."

BURTON'S FUEL ECONOMIZER

Attached to a stove pipe saves more fuel and radiates more heat than any other stove pipe attachment

AN EASY SELLER.

Assertions Backed by Guarantee.

The W. J. BURTON CO., Detroit, Mich.

WRITE FOR

A BOOK ABOUT THE ECLIPSE

NEW CATALOG No. 20

OF

ECLIPSE STOVES AND RANGES

THE ECLIPSE STOVE CO.
MANSFIELD, OHIO.

Repository, St. Anthony Park, Minn.
W. H. Gruenhagen, Mgr.

General Agency, Atchison, Kans.
A. J. Harwi Hdw. Co., Agts.

HERO Furnaces

FOR FURTHER PARTICULARS ASK
Chas. Smith Co.
122 Lake St., Chicago

BEST FOR A COLD CLIMATE

JUDGMENT

In business matters ought to make it plain to you that it is just as important to you to use good Asbestos Furnace Cement in the manufacture of your furnaces as it is to use good iron.

Colebrook's Asbestos Furnace Cement

is the best that can be manufactured. We have furnished the largest manufacturers of furnaces and stoves in the country, and are still doing it. We are ready to furnish you. Why not? Send us your next order. Put up in all sizes removable cover cans, tubs, barrels, and half-barrels.

MANUFACTURED ONLY BY

W. H. COLEBROOK, SONS & CO.

SYRACUSE, N. Y., U. S. A.

LARGEST MAKERS OF ASBESTOS FURNACE CEMENT IN THE WORLD.

CHAS. SMITH CO., Western Selling Agents, 122 Lake Street, Chicago, Ill.

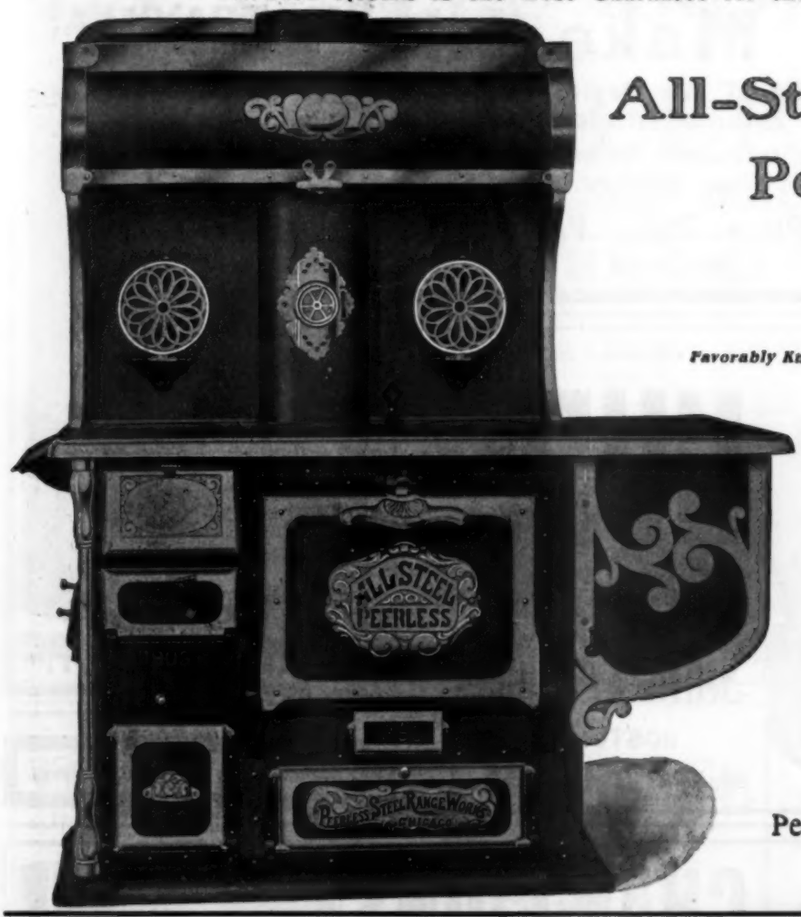
CHICAGO FURNACE SUPPLY CO.

64-66 West Monroe Street, CHICAGO

Furnace Pipe, Elbows and Fittings. Write for Special Prices and Illustrated Catalogue.

There are forty kinds of steel ranges made in the State of Illinois, and if thirty-nine of them were set in a row with all name plates removed not one stove merchant in a hundred could correctly name half a dozen. What is the use of handling these practical duplicates? If you do make a sale there is nothing but glory in it, for the man around the corner has cut the price below a living margin. Why not buy the fortieth stove? It is different in material, different in workmanship, different in appearance and different in construction from all the rest, and each difference stands for acknowledged superiority. It is The Chicago Jewel made by George M. Clark & Company Division of the American Stove Company, Chicago. When put on your floor it will almost sell itself, and will produce a surprising difference in your profit.

"A Good Record is the Best Guarantee for the Future"



All-Steel Peerless Ranges

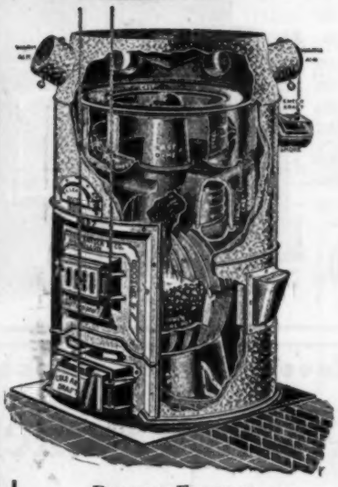
Favorably Known for Over Nine Years

Malleable Steel Top Plates, (ground smooth and bright)
Malleable Doors and other fittings,
Steel-Asbestos-Steel Flue Bottom,
Massive Fire Box,
Steel Oven Shelf,
Extra Large Ovens,
Extra Large Reservoirs,
Pan for elevating wood fire,
Pouch feed and blue steel (without extra charge)

Catalogue Shows These and Other Good Features.

Peerless Steel Range Works

CHICAGO.



Boomer Furnace

REGARDING

Boomer Furnaces

OR

Boomer Steel Ranges

We want to state in strongest terms possible that if you want the

HEAVIEST,
MOST DURABLE,
MOST ECONOMICAL

and easiest to take care of Furnace or Steel Range buy a **BOOMER.**

Boomer Steel Range

Neither time nor money is spared to make them the Best.
Buy Boomers and save your coal bills.
We invite investigation.

THE HESS-SNYDER CO.,

Manufacturers MASSILLON, O.

Border Copyright '98

Large 10 oz. Can.

We Make It!

The BEST Air Drying Iron Enamel Made.

Try a 1-Dozen Case From Your Jobber.

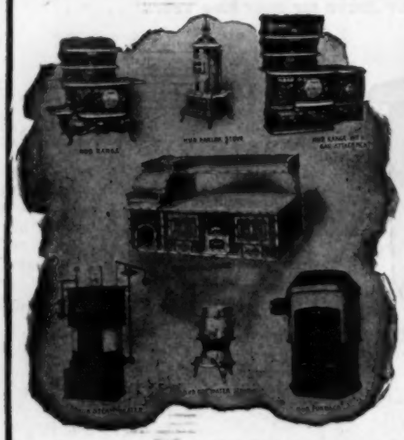
Nickel Plate Stove Polish Co.

CHICAGO

M. TRAVILLA,
QUINCY, ILL.,
MANUFACTURER
"Air-Tight" Stoves
ASK FOR PRICES.

Wellsville Polished Steel
"THE VERY BEST."

A few specimens of the extensive line of



HUB RANGES AND HEATERS

Manufactured and warranted by

SMITH & ANTHONY CO

BOSTON, MASS.

Send for descriptive circulars.

Advertising is the root of all money.

CHAMPIONS

ALSO MARQUARTS

They possess every feature of genuine merit known to modern steel range construction and have one feature found in no other range on the market in the shape of an additional flue, which is below the main heating flue, and conducts the air through the ash pit to the combustion chamber.

CHAMPION STEEL RANGE CO.

CLEVELAND, OHIO.

Some Steel Range Makers

put thousands into expensive cooking exhibits. Others blow in their profits on bizarre experimentation, We put **every dollar right into the Willard Steel Range itself.** That's what makes it so good. That's what makes it a quality seller. It's the best price seller on the market, too. Send for our price to the trade and then compare it with that asked by the catalogue houses for similar goods. If it is not enough lower to enable you to make a handsome profit and still undersell the catalogue houses just pass us up.

Wm. G. Willard, Mfr.

619-621 N. Fourth Street, ST. LOUIS, MO.

'TIS A WELL KNOWN FACT

THAT

MUELLER

FURNACES AND BOILERS

ARE THE BEST

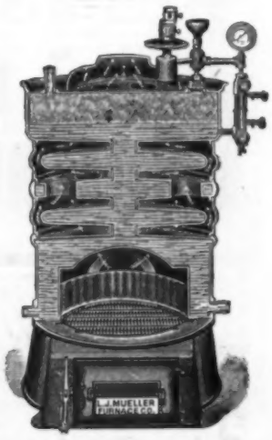
Write for Catalog and Prices.

EVERYTHING IN THE HEATING LINE

L. J. Mueller Furnace Co.

Established 1857

191 Reed Street MILWAUKEE, WIS.



BRAND STOVE CO.

We make largest line of cooking and heating apparatus, cast cooks, cast ranges, steel cooks, steel ranges, hotel outfits, heating stoves, furnaces, hot water and steam heaters. Send for catalogue.

MILWAUKEE, WIS.

THE SALE OF THE

TORRID ZONE FURNACE

during the first three months of 1903 has exceeded that of any other year in the corresponding three months by about six to one. If you are not on our list, you had better look us up and you will see what this great advance in the demand means.

We are getting out a new Catalogue that has many things of interest in it for the dealer. They will be ready for mailing by the 20th of this month—free for the asking.

Lennox Manufacturing Co. Cor. Ninth Ave. and Frederick St., MARSHALLTOWN, IOWA.

FARWELL, OZMUN, KIRK & CO., St. Paul, Minn., Northwestern Distributors.

CHAS. H. COSBY'S

20th Century Patented Air-Tight

Baker and Heater

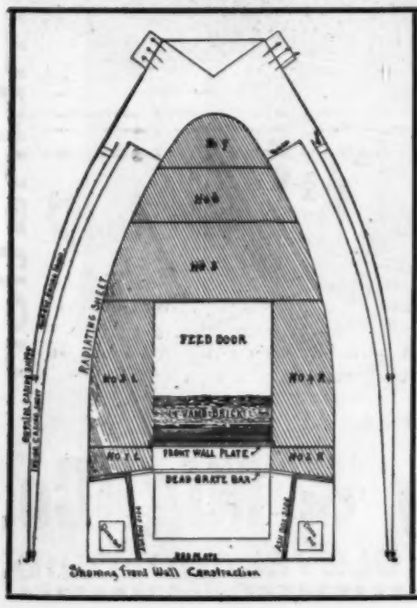
Wanted—Western Agents or some one to manufacture on Royalty plan.

Write for information to

CHAS. H. COSBY,
423 W. Broad St.,
RICHMOND, VA.

CHAS. F. MALONE,
ROLFE, IA.,
WRITES:

"If I went to South Africa I would want The American Artisan sent to me."



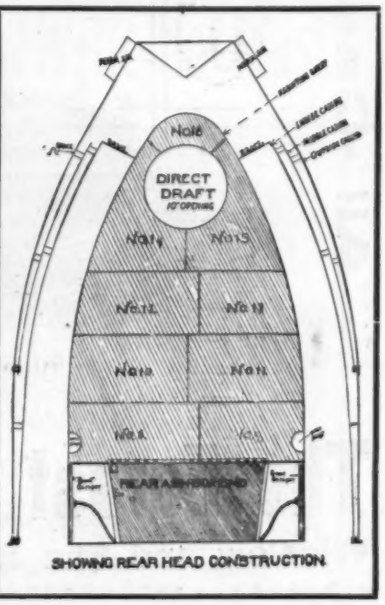
Showing Front Wall Construction

THE STANTON

is built on strictly scientific principles—each point covered by letters patent. Front and rear heads protected on inside by specially made fire clay blocks which help to equalize the heat. Flues are large making it possible to burn cheapest grades of coal.

Better write for catalogue.
Also keep looking at this space.

THE STANTON HEATER CO.
MARTINS FERRY, OHIO.



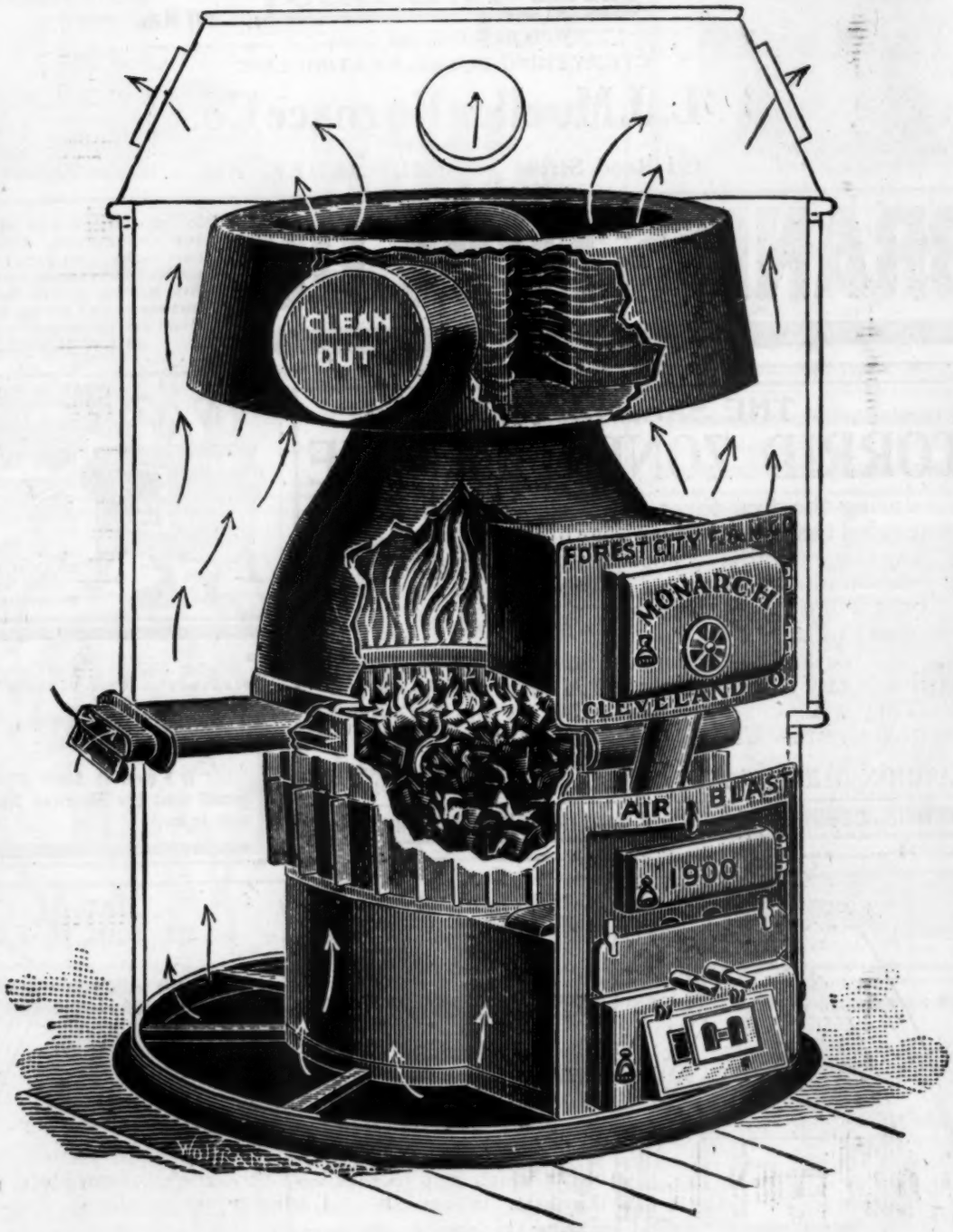
SHOWING REAR HEAD CONSTRUCTION

For "GOODNESS" Sake

...SELL THE...

Monarch Air Blast Furnace

All Cast Furnace for all Fuel



Coal and Natural Gas Combination

WRITE FOR CATALOGUE

The Forest City Foundry & Mfg. Co.

Winslow and Elm Streets CLEVELAND, OHIO.

OUR LATEST PRODUCTION

The New Radiant Home Force Draft Furnace

WITH

Original Patented Air Blast Fire Pot
One Piece All Cast Radiator
Extra Large Double Feed Doors
Air Blast Fire Pot and Force Draft

Ring insures Perfect Combustion with all forms of Soft Coal, Slack and Lignite

Burns Soft Coal, Slack and Lignite

EXCLUSIVE AGENCIES

Prices, terms, etc., on application.

GERMER STOVE CO.

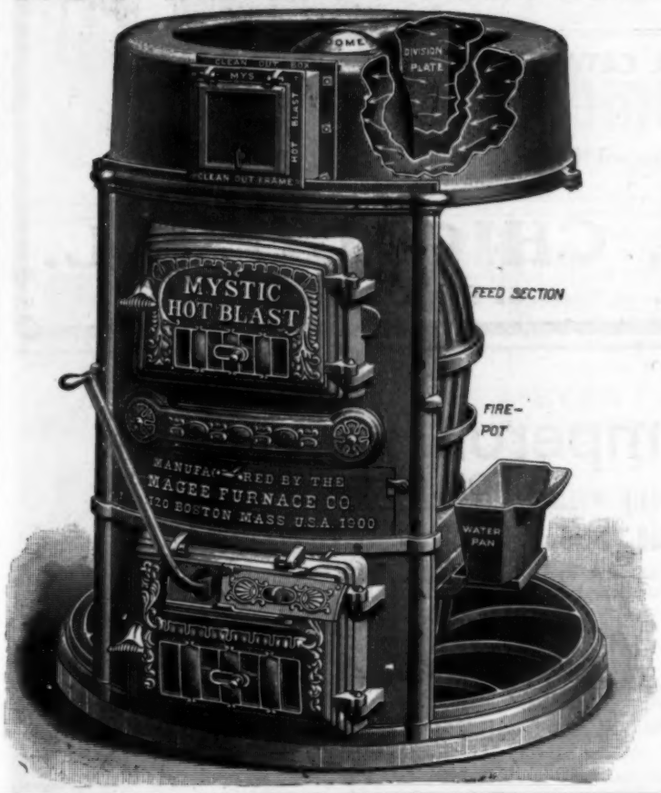
Largest Manufacturers of Strictly High-Grade STOVES, RANGES and FURNACES.

Main Office and Foundries: ERIE, PA.

WESTERN BRANCH:
231-247 Newberry Avenue, CHICAGO.

MAGEE MYSTIC HOT-BLAST FURNACE

CAST TO LAST.



No heater can be better than the material put into it. It may be worse. The material that enters into the

Magee Mystic Hot-Blast

is the best, while the Magee process of building is the result of 50 years' cumulative experience, seconded by unparalleled producing facilities.

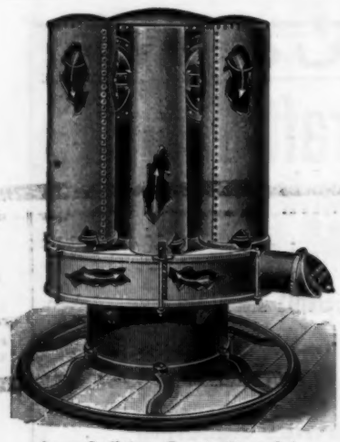
FEATURES

Low Construction, with either Solid Cast or Wrought Iron Return Flue Radiator; Economical; Durable; Easily managed. Heavy Sectional Pots; Cup Joints.

Write for Our Furnace Catalogue

MAGEE FURNACE CO., BOSTON

Most complete line under one name in the United States.



A Furnace Recipe.

One Part, Good Material.
One Part, Good Design.
One Part, Good Workmanship.

This is the one we use in making the

AMERICAN FURNACE

Every furnace we make is guaranteed and our furnaces will bear comparison with any made. It is clean, durable and economical. A boiler-plate furnace, hence it don't crack.

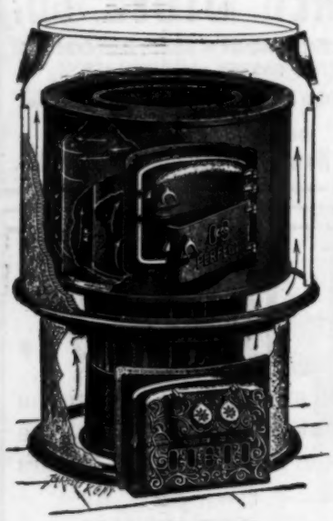
The American Furnace Co.

Large Radiators, Easy to Clean Out. 1911-13 Pine Street, - ST. LOUIS. MO. Burn Hard or Soft Coal or Coke. Large Doors.

Write for prices and secure the agency before the other fellow gets it.

Richardson & Boynton Co.'s

"PERFECT" FURNACES



COAL AND WOOD

Are Universally Known as First Class Goods.

SEND FOR CATALOGUES

Established 1837.

SOFT COAL.

84 LAKE ST., CHICAGO, ILL.

232-234 Water St., New York. 51 Portland St., Boston, Mass.

Emperor Furnaces

FOR WOOD.

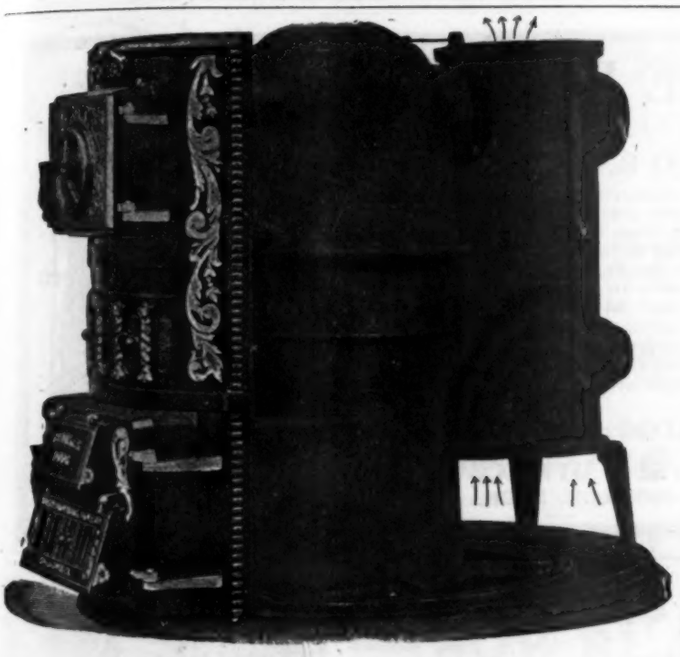
Simple, Safe, Durable. Economical in Fuel.

The Best and Cheapest Line of Wood Furnaces . . .
Furnished for either Brick or Galvanized Iron Casing.

SEND FOR CATALOGUE.

Bergstrom Bros. Co.

NEENAH, WIS.



The Crown "Low Down" Warm Air Furnace.

SEVERE USAGE

Is the lot of most furnaces, and only a furnace that is made extra heavy throughout will stand it.

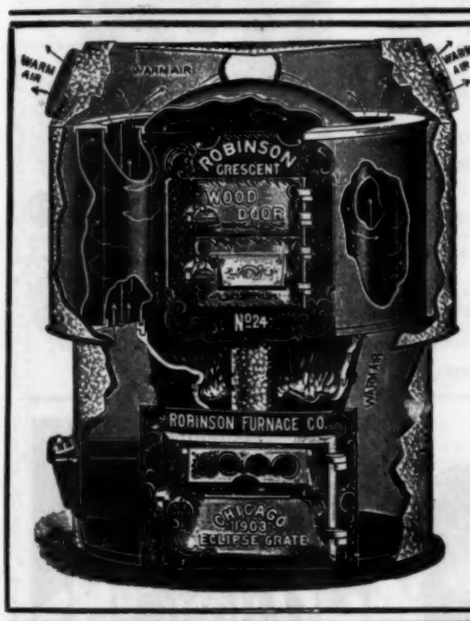
THE CROWN FURNACE

"Low Down" Type—Made in 4 Sizes

is such a furnace. It also has an extra large amount of radiation for the size of the fire-pot used. This furnace can be cleaned with the greatest facility.

ASK FOR OUR 1903 FURNACE BOOK

MARCH-BROWNBACK STOVE CO.,
POTTSTOWN, PA.



The Robinson Crescent

is a new addition to our Celebrated line of furnaces for 1903. This furnace is made with a crescent, or horse-shoe flue, and has a large combustion chamber. The fire-pot is corrugated in two sections.

The Eclipse Grate, which has become so popular is supplied with this furnace. This type of furnace is sure to be a good seller where a heater is wanted which is lower in price than our regular Tubular Furnace.

Robinson Furnace Co.

107-109 Lake Street, Chicago, Ill.

WEIR ALL STEEL GAS AND SOOT CONSUMING FURNACE.

THE HEAVIEST STEEL FURNACE MADE.

Absolutely Gas and Dust Tight. A Great Heat-Producer, but a Fuel Saver.

MANUFACTURED BY

THE MEYER FURNACE CO.

1300-1304 S. Washington St.,

Send for Catalogue. **PEORIA, ILLS.**

"The HANDY FURNACE PIPE"

Made with a View of Being Safe.

The saving of labor in putting it up really makes it the cheapest hot air pipe on the market.

MANUFACTURED BY

F. MEYER & BRO. CO.

Send for Catalogue. **PEORIA, ILLS.**

L. A. WILKIN, Chrisman, Ill., writes—"Please discontinue my ad. in your paper. With **the one insertion** I have a **half a hundred inquiries.**"

THE RECORD

of the

FLORAL CITY

Furnaces during the past ten years has never been equalled. They are, as a line, the best fitted and most powerful, economical and durable furnaces made, and we stand ready to prove this at any time by actual test. Perfect castings, skilful workmanship, careful supervision, these are the features that mark the superiority of the Floral City.

Monroe Foundry & Furnace Co.
MONROE, MICH.

A Solid Sheet of Steel

That's what our fire chamber is.

It beats them all in durability. Our use of vertical lines in the **Front Rank Furnaces** brings the air in direct contact with the entire heating surface.

These furnaces burn hard or soft coal or coke. We also make wood burning furnaces.

Send for our catalogue, it will give you a better idea of what we make.

FRONT RANK STEEL FURNACE CO.,
2301 to 2309 Lucas Ave., ST. LOUIS, MO.

Royal Heaters.

MANUFACTURED BY THE

HART & CROUSE CO.

UTICA, N.Y.

ALL THE LEADING LINES OF

STEAM, HOT WATER & HOT AIR,

FOR HEATING ALL CLASSES OF BUILDING.

236 WATER ST. N.Y. COLUMBUS. O. BRANCHES. 29 LAKE ST. CHICAGO. ST. LOUIS.

HEAT LIGHT

FOR THE
HOME
STORE
HOTEL
SCHOOL
CHURCH
OFFICE
COLLEGE
THEATRE
FACTORY
VILLAGE

INFORMATION FREE
SEND FOR IT.

DETROIT HEATING AND LIGHTING CO.
DETROIT MICH.

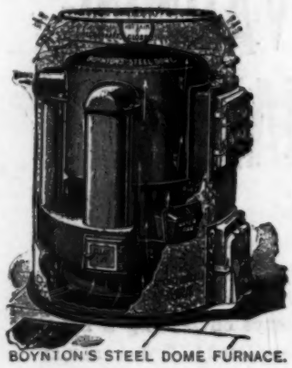
L. B. HOOKER, Sturgis, Mich., writes: "Your paper is a grand success. I believe no tinner or plumber should do without it. I try to keep up with the times and the only way is to find out what other shops are doing and the way to do that is to take THE AMERICAN ARTISAN."

1903

The Old Reliable

Manufacturers of
Up-To-Date Heaters

Steam, Hot Water and Hot Air



BOYNTON'S STEEL DOME FURNACE.

The Usual Fall Rush for Heaters with us is Commencing.

Please place your Orders as early as possible.

NEW CATALOGUES AND PRICE LISTS NOW READY

The BOYNTON FURNACE CO.

NEW YORK CHICAGO

1903

MALLEABLE STEEL RANGES are **PROFITABLE**

See FAULTLESS RANGE AD, Page 7, this issue.

QUAKER MFG. CO.

CHICAGO HEIGHTS, ILLINOIS.

MANUFACTURERS OF WALL REGISTERS FURNACE REGULATORS

WARM AIR AND COMBINATION HOT WATER HEATERS

Many New and Desirable Features

The Best Equipped Factory in the Country Goods Made on Co-operative Plan

FULLY WARRANTED

LIVE AGENTS WANTED

Persistent Advertising

ONE who watches carefully the pages of general advertising mediums is struck by two things: the persistency with which those advertisers who are recognized as successful maintain their advertising week after week, month after month, and year after year; they never seem to abate their effort, apparently the volume of their business increases steadily. The other thing noticeable is the large number of advertisers who thrust their announcements above the surface for a little while and then sink into oblivion. They either had not merit as a basis for their claims or they did not possess the skill to steer their enterprise successfully, or else they lacked the nerve to put forth proper effort.—*Advertising Experience.*

"THE BEST" TANK HEATER

This is the one you should have if you want something to last for years.

Cast in one piece—made from the best grade of cast iron, solid cast shell—no seams or joints to leak—cannot be damaged by excessive heat or freezing—is provided with one grate and ash pan; ashes can be removed without taking heater from tank.

Made in two sizes, 17 inches diameter, 24 inches high, weight 200 pounds; 13 inches diameter, 24 inches high, weight 145 pounds.

Has other good qualities. Why not write for them, and send order for sample and terms.

Secure the agency for "THE BEST" and handle the leading tank heater.

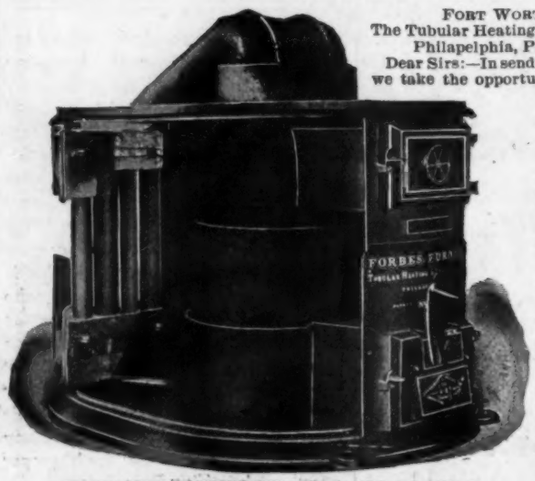
STERLING FOUNDRY CO.
STERLING, ILL.

MONCRIEF
WARM AIR FURNACE.

Specialties
- All Cast Iron.
- Moncrief Duplex Grate.
- Large Radiating Surface.
- Double Fire Pot.
- Large Grate Surface.
- Top Return Flue.
- Simplicity, Durability, Economy, Cleanliness in Use.

HENRY & SCHEIBLE CO.
6-8-10 Long St., Cleveland, O.

TUBULAR HEATING AND VENTILATING CO.
PHILADELPHIA, PA.



FORBES FURNACE. Only 61 in. High.

FORT WORTH, TEXAS, June 12, 1903.
The Tubular Heating & Ventilating Co.,
Philapelphia, Pa.
Dear Sirs:—In sending you the inclosed check, we take the opportunity to say that the two No. 6 Forbes heaters purchased from you last fall have given the fullest satisfaction. They are in use in the "Madrid," a small apartment house, containing twenty rooms. We have found that they not only furnished plenty of heat but did it with a very satisfactory coal bill. The fuel used was soft lump coal for the first fire in the morning but the rest of the day only slack, from soft coal, was used, costing $2.50 per ton. We think the heaters a great success and do not see how you can improve upon them.
Very truly, &c.,
The Fort Worth Real Estate & Investment Co.,
By Frank Gray, Pt.

THE HOUSE-WARMING MANUAL

Is beyond all doubt the best book published on practical house heating.

It contains the plans and essays on heating a house submitted in THE AMERICAN ARTISAN House Warming Competition for $300.00 prizes, and is in fact

An Encyclopedia of the Most Modern and Improved Practical Methods of Heating a House by Steam, Hot Water and Warm Air.

A Leading Western Newspaper says:

"The volume is a well-bound and artistically printed and illustrated volume of nearly 300 pages, and contains some masterly essays on steam heating, hot water heating and warm air heating. Nearly every prominent authority in this field is quoted, and an application of principles and improvements suggested covers all technical details in a simplified and practical way. House plans and diagrams accompany the subject matter, which deals specifically with radiation, combustion, ventilation, prices, estimates, and the best and latest methods for placing, connecting and utilizing the apparatus adopted."

Price, Only $3.50 Per Copy.

For sale by all booksellers or the Publisher

Daniel Stern,
69 Dearborn Street,
CHICAGO.

WHY NOT

When you are writing a letter of introduction,
When you are requesting payment of a debt,
When you are making application for a position,
When you are writing a draft to your own order,
When you are making an agreement for hiring a workman,
When you are assigning with power of attorney,
When you are making a merchandise broker's contract,
When you are applying for incorporation papers,
When you are taking a note from a married woman,
When you are desirous of acquiring a trade mark,
When you desire to send money to a foreign country,
When you desire to detect counterfeit money,
When you desire to draw up articles of co-partnership,

DO IT RIGHT?

You Will Learn How by Consulting The Manual of Business.

The Beet Sugar Gazette, Chicago, writes:

"'The Manual of Business' is intended to be a reference book for the many forms of business usage and correspondence which enables a man to carry on his business in accordance with the current commercial customs. The following table of contents shows the wide field covered by the author: Penmanship and Commercial Correspondence, Bookkeeping, Debts and Collections, Banking, Commercial Papers, Contracts, Notes, Patents, Measurements, Public Roads, Postal Regulations, Discount and Interest, Property, Real and Personal, Transportation, Rights of Parents, Parliamentary Rules and Forms of Resolutions, Dictionary of Business Terms, Business Abbreviations, Business Maxims. The book is well printed and bound, and will make a pleasing addition to any library."

Domestic Engineering, of October 25, says:

"'The Manual of Business' is a book of 263 pages containing a collection of correct business forms for executing all commercial instruments, commercial data and advice on the thousand and one questions of correct methods that are constantly arising in every-day business life. It is compiled from various sources by Sidney P. Johnston, and published by Daniel Stern, of 69 Dearborn street, Chicago. This work is intended as a reference book for retail merchants, and we believe with the compiler that it will prove 'a ready reference work in regard to the many forms of business usage and correspondence whose employment identified the man posted in commercial methods and commands an attention and recognition that the incorrectly worded commercial instrument is rarely accorded.'

"This work will also prove invaluable to the young business man, acquainting him with the forms in vogue in commercial life and increasing his commercial worth as he masters its points."

THE PRICE IS $3.50 A COPY. FOR SALE BY BOOKSELLERS EVERYWHERE, OR

DANIEL STERN, 69 DEARBORN STREET, CHICAGO.

A WALL REGISTER that requires no special Tin or Carpenter work, and is Standard in size:

The

Independent Deflecting

It is the ONLY ONE

MANUFACTURED BY
INDEPENDENT REGISTER CO.
154 Columbus St. CLEVELAND, OHIO
Eastern Representatives:
W. H. LANDERS CO., Syracuse, N. Y.

THE AUER WALL REGISTER

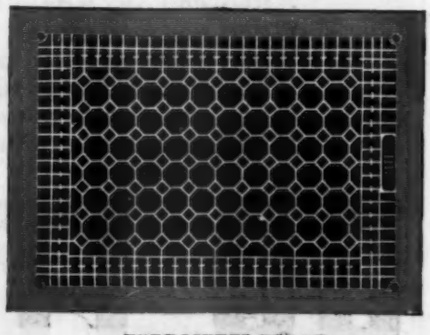
Perfected and Tested. Not an Experiment. The only one that has the cosey appearance of the fireplace. The only one that is practical for a foot warmer.

The only one that closes tight having no grating over front to catch dirt and dust.
Write for Catalogue.

The AUER REGISTER CO., Toledo, O.

FERROSTEEL SIDE WALL

Examine Genuine
FERROSTEEL REGISTERS
and you will
BUY NO OTHER.
They are
The Absolute Best.
Mechanism Perfect.
Finish Superb.
Price Lowest.
Terms Easiest.



FERROSTEEL FLOOR

FERROSTEEL COMPANY, CLEVELAND, OHIO.

GILT EDGE FURNACES

THE MOST COMPLETE LINE MANUFACTURED FOR ALL KINDS OF FUEL. DURABLE, ECONOMICAL, GAS TIGHT.

***The* Jones Side-Wall Register . . . . . .**

The register having full capacity of hot air pipe for large living rooms or for heating a room on the first floor and extension to second. Has a face of neat design and not a hole in the wall when open. Has a regulator which holds the damper permanently in position. Can not get out of order. Double safety box included in each register.

Send us sketch for plans of latest method of heating with *GILT EDGE FURNACES* and *JONES REGISTERS*, least work, least pipes, least waste of heat, most economical.

R. J. SCHWAB & SONS COMPANY,

Manufacturers of Gilt Edge Furnaces and Northwestern Distributors of Jones Side-Wall Registers.

MILWAUKEE, WIS.

JOHN H. ROBERTS,

Writes: "I consider **The American Artisan** a great help to any tinner or any man in business."

MUNHALL, PA.

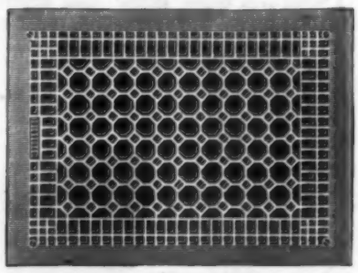
BEST, AND COSTS LESS

THAN MOST OTHERS

Wall Register.

MUELLER
REGISTERS

For WALL and FLOOR



Floor Register.

WRITE FOR PRICES

L. J. MUELLER FURNACE CO.

191 REED STREET MILWAUKEE, WIS.

SYMONDS WALL REGISTER

Is the simplest, cheapest, strongest, quickest installed, easiest operated, best in principle, lightest for shipment, most practical.

Write for circular and free sample.

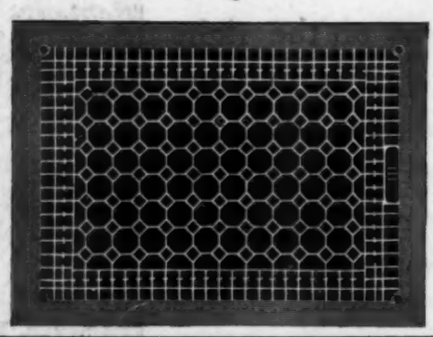
Shipments prompt.

Satisfaction sure.

SYMONDS MFG. CO., East St. Louis, Ill.

"The trade journal is an advertising medium distinctly different from any other. It is read exclusively, or practically so, by people who are interested in the trade which it represents. The manufacturer who places an advertisement in a trade journal has the assurance that every copy is seen by people who could use his goods and who might become customers."

WARM AIR REGISTERS

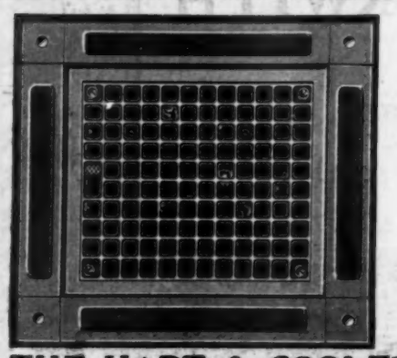


Do not buy Registers until you write us. Large assortment—all sizes—prompt shipments.

WE ARE MAKERS

The Walworth Run Foundry Co.

Cleveland, Ohio.



VENTILATORS
H. & C. WROUGHT STEEL REGISTERS

Increased air space, less weight and more strength are features of our Wrought Steel Registers.

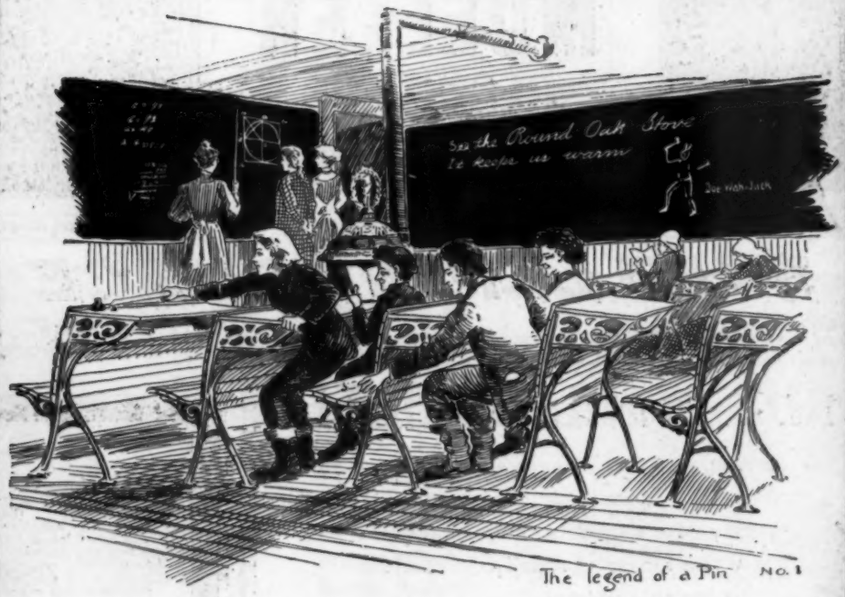
We are now making all sizes of Registers, Face Plates, Borders and Ventilators up to 24x42 inches.

SEND FOR NEW PRICE LIST

THE HART & COOLEY CO., Manufacturers, NEW BRITAIN, CONN.

General Sales Agents: STANLEY WORKS, New Britain, Conn., 79 Chambers St., New York, 19 Lake St., Chicago

ROUND OAK STOVES RANGES FURNACES



IT takes time to build up a good, enduring furnace business—it can be done, though! One must have a furnace of quality and the new, right methods of putting them in. We teach Round Oak customers the furnace business when requested. Is your furnace business on the right basis? Are you doing your share of it in your town? Could you be interested in new, advanced methods of furnace heating and a furnace of quality? If so, write us. "Warmth and Comfort" our furnace book sent promptly on request.

Estate of P. D. BECKWITH

FRED E. LEE, Manager,

Dowagiac, Michigan

Makers of good goods only.

6

STANDARD OF AMERICA

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES, THEIR POSSESSIONS, AND CANADA, (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00.
IN FOREIGN COUNTRIES EXCEPT CANADA, ONE YEAR, POSTAGE PAID, $4.00.
Address all Letters, communications and remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,
69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.
THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, AUGUST 29, 1903.

IDLE capital is a drain on resources which eventually compels retrenchments or the increase of working capital. If a tradesman purchases heavily at one time he locks up much of his capital where he cannot use it and where it suffers some deterioration. Heavy buying doesn't always mean heavy selling. If it did, there would be no objection, perhaps, especially if retailers were equipped with abundant capital, but more often heavy buying and comparatively light selling go together, and stock drags indefinitely, finally compelling sacrifice to clear out surplus holdings.

THE manufacturers of the United States imported nearly five hundred million dollars' worth of materials for use in manufacturing in the fiscal year just ended. Materials for use in manufacturing thus formed nearly one-half of the total imports of the United States last year. The Department of Commerce and Labor through its bureau of statistics, in a table just completed, shows that the total value of manufacturers' materials imported in the fiscal year 1903 was $489,471,667, and that this formed 47.73 per cent of the total imports. In the preceding year the total value of the manufacturers' materials imported was four hundred and fifteen million dollars, and formed 46.14 per cent of the total. In 1898 the total importation of manufacturers' materials was two hundred and forty-seven million dollars, and formed 42.07 per cent of the total.

THE lumber markets of the Orient and the share which the United States is likely to have in supplying them is the subject just now of some attention by the Department of Commerce and Labor through its Bureau of Statistics. The bureau recently received and published reports of American consuls in the Orient which announced the arrival of the first cargo of lumber in the Chinese market by a Russian vessel from Vladivostock. This fact opens the question of future competition for the Oriental market between the American lumber interests on the Pacific coast, on the one hand, and that of the Russians in Siberia and on the Yalu river on the other. In both cases enormous resources are awaiting development. The American industry of the Pacific coast has the advantage of organization on a large scale and of mechanical equipment unequalled by that of any other field in the world. This is evidenced by the rate of annual production. Unofficial estimates put the annual cut of lumber and shingles of the three Pacific states at 4,600,000,000 feet, of which California supplies 860,000,000 feet; Oregon 740,000,000 feet, and Washington 2,300,000,000 feet. At this rate it is calculated that the forests of the Pacific coast will be exhausted in forty years.

THE Agricultural Experiment Station of the University of Illinois is sending out a *brochure* dealing with the interesting subject of the "Roasting of Beef." This pamphlet is the handiwork of two learned ladies, Isabel Bevier, Ph. M., and Elizabeth C. Sprague, and they evidently have it in for the oven thermometer, as they say:

"The means for securing accurate work with the stoves, ranges, ovens and utensils now upon the market are not all that could be desired. For instance, how is any cook expected to be able to make a definite statement about what is going on inside the average oven, as now constructed? The much lauded oven thermometer 'which can be placed in the door of any oven,' by actual test with a good chemical thermometer showed a deviation of from 50 to 100 degrees from the standard. It requires rare intelligence indeed to tell what is going on inside a black iron box by looking at the outside of it."

We believe this to be a libel on the oven thermometer. While we do not claim that these instruments are perfect, we know "from actual test" that there is at least one oven thermometer which never showed a deviation of over seven degrees from the standard. We would be pleased to hear from our readers regarding this matter.

A NEW source of national wealth through the possession of the Philippines is suggested by the remarkable increase within the last three years in our imports of tin. The importation of tin in the last fiscal year amounted to 88,000,000 pounds, and the aggregate value was $23,000,000. In 1890 about 35,000,000 pounds, worth $7,000,000, came into this country.

The rapid growth in the use of tin in the United States, coupled with the fact that practically none is produced here, recently gave rise to the practicable scheme of importing it in the form of ore and smelting it and turning it into pigs in this country. A big plant was erected and the shipment of ore from the Malayan peninsula was about to begin, when Great Britain blocked our plans by clapping a heavy duty upon all tin exports from her colonies. The tariff was prohibitive, our smelting plants stand idle, and the British colonists still retain the profits incident to reducing the metal from its raw state.

Three-fourths of the world's tin supply comes from the Malayan peninsula, which is near the Philippines and like them in general formation. The existence of rich tin mines in our islands is believed by experts

to be more than a probability. If such it proves, we can afford to laugh at England and her export tariff.

COMMERCE between the United States and Canada was larger in the fiscal year just ended than in any preceding year. This is true both as to imports and exports. The figures of the year's commerce, presented by the Department of Commerce and Labor through its Bureau of Statistics, show that the imports from Canada amounted to $54,660,410, and the exports to Canada, $123,472,416. In this term is included British Columbia, Quebec, Ontario, Nova Scotia and New Brunswick. Of the imports of the year, 38 million dollars, speaking in round terms, were from Quebec and Ontario, 10 millions from New Brunswick and Nova Scotia, and 6 millions from British Columbia. Of the exports 110 million dollars were to Quebec and Ontario, 7 millions to New Brunswick and Nova Scotia and 6 millions to British Columbia. Both in imports and exports, the total of the year's commerce with Canada was larger than in any preceding year.

Young Men at the Front.

THE appointment of Alva C. Dinkey as head of the Carnegie Steel Company, the largest of the subsidiary companies of the United States Steel Corporation, is further evidence of the oft-repeated assertion that this is an era of young men. In striking contrast to the old-world point of view that no man under middle age should hold a place of any considerable responsibility is the position taken by bustling, strenuous, iconoclastic America. The energy and hot flush of youth, rather than the accumulated experience and conservatism of the old, is relied upon to carry the modern world to that pinnacle of industrial and commercial success which it has attained in the past few decades. The burden has been shifted from the shoulders of the fathers to the sturdy backs of the sons, that there may be no faltering or staggering in this onward rush. Years ago the Pennsylvania railroad adopted the plan of filling responsible positions with young men trained up in the service of the road, and the directors of many corporations have since then realized the wisdom of the move. While still in his thirties, Charles M. Schwab was made president of the greatest industrial corporation the world has ever known, and at an even more youthful period he had been the head of the Carnegie company. Mr. Corey, who recently succeeded Mr. Schwab as president of the steel trust, is also a young man, and Mr. Dinkey, who takes the place held by Mr. Corey as chief executive of the Carnegie concern, is said to be only 30. The veterans of the "Old Guard" who have made America what it is are now falling back, and the youth of the land, flushed with first victory, is pushing to the front. Nothing can stay their progress, and they are rapidly taking their places in the front rank. Their name is legion and at their hands the country expects much. Character, a sturdy honesty and an iron determination made the pioneers successful in the industrial and commercial world, and if the same principles are firmly fixed in the hearts and minds of those who are now taking the places of their fathers, there will be no cessation in the onward march. It is truly an era of young men, and, as Nelson demanded loyalty and faithfulness of his men at Trafalgar, so this country expects every young man to do his duty.

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

THE hero of romance fares ill amidst modern surroundings. Walter Scott made De Bracy arriving at York with his horse bloody from spurring a romantic figure. The writer of a 1903 romantic novel tells how his hero plugs up a Scottish hill on a bicycle "with the spokes crinkling at each stroke of the pedal."

After the summit of the hill has been attained and the descent commenced, "he threw his heels carelessly on to his handle-bars and positively flew down the hillside, leaving everything behind him, drinking in the delicious atmosphere." Of course, this rider did not enjoy the luxury of a free wheel, or he might have been spared the trouble of throwing his heels so carelessly over the handle-bars, and so recklessly courting disaster if not death. Another curious feature about this ride is that while he is still careering at this breakneck pace, he "meets a party of gypsies, who, as born diplomats, put forward their best looking girl to do the begging."

The spectacle of a pretty gypsy girl begging from a scorcher flying down a hill with his feet on the handle-bars can be said to belong exclusively to the field of modern romance.

* * *

FROM the Golden (Ill.) New Era of Aug. 21st I learn that "Week after next Franzen & Miller will have the grandest steel range cooking exhibition ever held in this country."

* * *

ALL readers of Lord Byron have wept over the sorrows of the "Prisoner of Chillon," and have shuddered as they thought of the cheerless cell in which he was confined.

> "There are seven pillars of Gothic mold,
> In Chillon's dungeons deep and old,
> There are seven columns, mossy and grey,
> Dim with a dull imprisoned ray.
> A sunbeam which hath lost its way,
> And through the crevice and the cleft
> Of the thick wall is fallen and left;
> Creeping o'er the floor so damp
> Like a marsh's meteor lamp."

The aforesaid prisoner, Bonnivard by name, is a historical character who mused on the folly of being off-side in the political football game from 1519-1536. A friend of mine recently sent me a picture showing a second "Prisoner of Chillon" who has been an inmate of that dismal institution from 1439-1903—viz., a heating stove. This stove is slightly higher than the door and consists of a square pedestal about the shape of an ordinary refrigerator, on top of which is a radiator built on about the lines of the 1903 gas radiator. The "floor so damp" that chilled poor Bonnivard was evidently nearer the water's level than that where the stove was kept, as rust has not as yet eaten as a canker into its sides. From the tone of Bonnivard's autobiographical remarks he could not have been im-

prisoned very near the stove, or else, in spite of its age, it was a pretty poor stove.

Assuredly when the time comes the stove world should do something appropriate to celebrate the 500th anniversary of this historic cast iron heater, which is due only thirty-six years hence.

* * *

IN a daily paper of Aug. 28th I find the following special dispatch from Louisville, Ky: "In the arrest of Jacob W. Geist in this city to-day local detectives assert that they have one of a gang of "fake directory" swindlers who have secured over $1,000,000 from merchants and have been all over this country and Europe. They claim to publish a national gazetteer in New York and Chicago, and where bona fide orders for advertising are given the amount to be paid, it is charged, is raised, while applications for sample copies are turned into contracts for payment at the central office, say the detectives, by means of acids and printing appliances. Five local firms say they were swindled in amounts ranging from $25 to $100."

In the Ogygian days of advertising, when all was chaotic business men might have been pardoned for being gathered in by these unprincipled sharks. But to-day, when lines between legitimate and illegitimate advertising are so closely drawn, it seems passing strange that fakers can still find so much gullible material.

* * *

THE Columbia, S. C., States is authority for the statement that Captain S. S. Ross of Gaffney, S. C., has located a tin vein on his land that is half a mile wide, a mile long and thirty feet deep, and that this vein will yield 50 per cent of tin ore. Sifting this statement down to mathematical facts, I find that Captain Ross has but to dig down to his stanniferous strata and after a little washing secure 209,088,000 cubic feet of pure tin. As the weight of a cubic foot of tin is 455 pounds, Mr. Ross has underneath his back yard 95,135,040,000 pounds of this valuable metal, worth 28 cents spot this 29th day of August, 1903, or a bagatelle of $26,637,801,200. What is Rockefeller's or Vanderbilt's or J. Pierpont Morgan's wealth in comparison with the twenty-six billions of dollars that will shortly flow into the Ross exchequer?

* * *

SOME time ago the legislature of the state of Indiana enacted a law at the request of the labor organizations, providing that unskilled labor should not be employed by counties, cities and towns in that state for less than twenty cents an hour, and providing a fine or imprisonment for any person or corporation doing public work to employ unskilled labor for less than that wage. That law has been held to be unconstitutional by the Supreme Court of that state. In an opinion written by Judge Dowling it was held that the law interferes with the freedom of contract, and that the legislature can no more fix the price of labor than it can the price of bricks. The appeal grew out of a suit of a laborer named Frank Street, who, in the Wayne Circuit Court, sued the Varney Electrical Company for twenty cents an hour. In the opinion Judge Dowling says: "No sufficient reason has been assigned why the wages of the unskilled laborer should be fixed by law and maintained at an unalterable rate, regardless of their actual value, and that all other laborers should be left to secure to themselves such compensation for their work as the conditions of supply and demand, competition, personal qualities, energy, skill and experience may enable them to do."

* * *

J. J. MCCLOSKEY, in a recent address before the Furniture Association of America in the course of an address on the traveling salesman, said: "The men who save money in the traveling fraternity are few. No matter how much they earn, no matter how faithful they may be to their employers, nor how valuable, they fail to accumulate. We are thinking now of straight traveling men who have to spend a portion of what they earn in paying their own expenses, and that brings me to the great burden of the traveling man. In pretty much all cases, without the necessity of my citing instances, manufacturers of furniture, parlor furniture, upholstery goods, anything you may name, the traveling man has had a miserable eking out of existence for several years. They have never been top notch, never been especially successful with their lines, which, for some reason or other, have not sold as they should. The manufacturer finally desires to hire a traveling man. If he were going to put in a new engine or a new machine for tufting or spend some money with a trade paper for advertising, he would make an appropriation to put it into it and wait for results. If the results were not successful he would merely charge that amount of money to profit and loss, as is customary. The manufacturer engages a traveling man who had been successful in his lines, and who has sold goods as well as anybody could sell them, and who has not lost one bit of his ability, but is as tireless in his work as he ever was, and he is handicapped; the line is not very well known, or if it is well known it is against it. This man takes this line of goods, a small amount of expense money the manufacturer will hand him to take him out to some point to do business, and if the traveling man does not make a success in a week or two weeks with the line that this man has been trying for ten years to make successful, then he is a failure and is called in! The money he has spent is charged to him as overdrawn, simply because the employer made the stuff that would not sell. That, to my mind, is the greatest burden of the traveling man to-day."

* * *

FROM the Clinton (Ia.) Advertiser of Aug. 25th, I learn that "A small tornado struck the town of Scranton, doing considerable damage. The plate glass front in Hall & Lease's hardware store was completely demolished by flying timbers, several show cases also being broken. Several people in the store room were hurt by the flying glass."

* * *

FROM the Ann Arbor (Mich.) Argus of Aug. 18th I learn that "John C. Fischer, hardware merchant, received this morning a supply of iron for the manufacture of galvanized band iron, which will be used for making new name stakes to replace the worn out ones in the botanical gardens on the campus."

News Siftings.

The manufacturers of steel hoops have reaffirmed prices.

The Seattle Chamber of Commerce has indorsed the plans of the Seattle Iron & Steel Co.

James Smith, Jr., has been appointed receiver for the Union Iron Works, San Francisco, Cal.

The United States Steel Corporation have purchased all the iron ore properties of the Chemung Iron Company, Duluth, Minn.

The Royal Worcester Polish Co., 222 Chamber street, Worcester, Mass., capitalized at $3,000, will shortly place their product on the market.

Ziba L. Squire, Asa L. Mosher and Jerome M. Hobart are the incorporators of the Celoron Steel Company, Celoron, N. Y., capitalized at $50,000.

Richard F. Tully, William C. Sherwood and T. W. B. Middleton are the incorporators of the Burn Iron Company, Jersey City, N. J., capitalized at $450,000.

It is said that George E. Pinkham of Lambert's Point, Va., has invented a process whereby the highest grade of steel can be made from the cheapest material.

William Wiley, Edgar Washburn, Emma C. Wiley, Mary L. Washburn and Frank Washburn are the incorporators of the Catskill Foundry and Machine Works, Catskill, N. Y., capitalized at $50,000.

The Brilliant Gas Lamp Co., 42 State street, Chicago, are makers of the Brilliant gas lamps, every one of which is guaranteed. It is said that the average expense of a 100-candle power light is less than half a cent a day.

We acknowledge our indebtedness to the Davison Mfg. Co., 110 Front St., Brooklyn, N. Y., for a very attractive nickel-plated paper weight formed by a combination of their miniature nickel-plated anvil, wrench and hammer. It is a most artistic piece of workmanship.

The Century Stove & Mfg. Co., Johnstown, Pa., have re-elected Rowland S. Wilson of Pittsburg, president; Robert Munroe of Pittsburg, vice-president; John H. Waters of Johnstown, treasurer, and E. C. Warren of Johnstown, secretary and general manager.

Seattle, Wash., is very anxious to secure an iron and steel mill, also a stove plant. The Seattle Post-Intelligencer in a recent article points out the fact that the people in Washington pay over $200,000 a year in freight charges alone on the stoves, ranges, iron beds and sheet iron which they at present purchase in the Central West.

J. Wickramanayaka & Co., Kalutara, Ceylon, are dealers in plumbago, mica, precious stones, etc., on which they can make the American trade attractive prices. They are also willing to accept the agency for anything in the line of machinery, etc. They also make a specialty of selling precious stones and have built up quite a trade in this line. Kansas City Jeweler and Optician says: "J. Wickramanayaka & Co. of Kalutara, Ceylon, the well-known and old-established firm of dealers in precious stones, are receiving a large trade in this line from the United States. Kalutara is so situated in the gemming distrct that this firm is in position to select the best of the output."

"MALLEABLE MENTION."

The Faultless Mfg. Co., 617-621 Austin Av., Chicago, beat the average circus rider by a block as they are riding two fiery steeds at one and the same time. They are steel range manufacturers and also publishers. Their steel range is the popular Faultless malleable and their publication is "Malleable Mention." Singular to relate, their publication devotes most of its crisp editorialettes to saying a good word for the Faultless malleable steel range.

It points out the advantages of malleable ranges and makes the trade a real exciting offer. While sensational, this sheet is not yellow, as its publishers stand ready to back their very liberal offer to the trade, which is as follows:

"If you can use the best malleable range on the market we can save you big money if you order direct by mail. Of course, you must first learn from personal inspection what the Faultless is like. If there is no Faultless agency in your town and you order sample now, we will refund to your customer our profit on this one range. Here is our plan in detail:

"When you have sold the range at regular retail price, reporting to us when you pay for range name of your customer and date of sale, we will promptly pay back to your customer four dollars and fifty cents.

"Example: No. 818 square range with high closet (we don't make high shelves) would cost you $36.58 plus freight (no breakage on malleables). You sell this range for $50.00, making about thirteen dollars' profit on your sale. No doubt you know it's easier to sell a fifty dollar malleable than it is to sell a thirty dollar ordinary.

Net results: The dealer completes a profitable deal, maintaining his regular price. The buyer gets the range at about wholesale price. The maker loses his profit on one range, but gains two friends, viz., the dealer and the buyer. Is it worth the price?

"This offer is good only for present acceptance from towns where no Faultless agency has been established and applies to the Faultless malleable steel range only."

JEWEL STEEL RANGES.

George M. Clark & Co. Division of the American Stove Co., 72-76 Lake St., Chicago, send us a handsome catalogue, showing their line of Jewel steel ranges. Recognizing a demand for malleable iron tops, this firm are prepared to fill orders for Jewel steel ranges with malleable anchor plates, centers and covers at a small additional cost.

These ranges are constructed with bodies having an outer plate of heavy polished steel and thick asbestos board within the heavy steel lining. Where the heat is most intense the asbestos is from one-half to three-quarters of an inch thick.

Square polished steel corner posts into which the sides are locked do away with rivets and bolts.

Jewel ovens are formed from one piece of heavy steel, double seamed and flanged in the middle of the

bottom to prevent buckling. They are absolutely air-tight, thus ashes and gases are kept out.

Riveted to the arched top of the oven is a very heavy cast iron brace which supports the anchor plates at two points.

Jewel ovens are exceptionally large; they are quickly heated and very even bakers. A false bottom, four inches below the oven, keeps in the heat and protects the floor.

There are no joints whatever in the oven door, for it is drawn from one heavy piece of steel. It is heavily nickeled all over, and has the word "Jewel" in medallion form in the middle. Two braces support the door when open, making of it a strong, stiff shell.

Jewel anchor plates, centers and covers are very heavy and on the side exposed to the heat are stiffened with ribs or fins. These absolutely prevent warping and increase greatly the life of these parts.

The anchor plates in which the covers rest are supported by the range body, but are not fastened to it, and are, therefore, free to expand and contract without producing the slightest strain on any part of the range.

Linings in Jewels are sectional, ventilated and very heavy. Not only is there air space back of the linings, but there is an opening for ashes, which may sift through, to fall to the ash pan. This prevents their burning out and gives them a longer life.

The size of the fire box is the same in all these steel ranges, and the linings, which are very heavy and ventilated by an air space at the back, are sure to fit.

The back flue is made with a cast iron elbow at the bottom. It can quickly be removed by taking out a few bolts.

One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

RADIANT HOME STOVES AND RANGES.

The Germer Stove Company, Erie, Pa., send us their pretty Catalogue A, showing their line of Radiant Home stoves, ranges and furnaces. The Radiant Home steel range is made with hammered, polished body and four styles of linings. The body has double walls lined with asbestos, hand riveted every two inches, with pocket cement joints, large sheet flues and cast back flue. There is a double flue bottom preventing chilling of the oven, cemented oven top, heavy single oven bottom thoroughly riveted and braced to prevent buckling, ventilated oven, screw draft in ash pit door, direct draft damper and sectional ring griddle. The spring oven door is double latched with malleable iron hinges. Other features are improved drop hinge fire door, new left end draft door, large broiler and pouch feed door, all cast, removable reservoir attachment fitting all sizes, moisture pocket in bottom of cast-iron reservoir encasement, and removable duplex grates. The nickel-plated parts include top band extending around the end shelf of reservoir, oven door frame handle and panel, fire door panel and handle, ash door, hinge housings, oven door catch, corner brackets on back strip, reservoir panel, screw draft, clean-out panel, towel rod, shaker, lifter, knobs and bolts.

The features of the Radiant Home cast ranges include large top cut in four sections, interlocking long center, heavy lined short centers, patented air blast linings, extra heavy fire box linings, brick or cast iron, extension fire box forward, extra large wood door, extra large bracket and shelf, reservoir mounted with rods, large white enameled reservoir, tin lined oven doors, large bailed ash pan, oven door kicker and water fronts. The nickel parts include oscillating outside oven shelf, steel high shelf band, tea shelves, front door panel, oven door panel, fire door panel, reservoir panel, closet panels, towel rod, knobs and pins.

The Radiant Home base burner has pocket joints, circular bottom flue, large hot air flue, full radiating surface and duplex grates. The nickeled parts include gold-plated urn, swing cover, top, corners, nickel and tile front name plates, ash door panel, rails and brackets, legs and sheets, knobs and hinge pins.

The Radiant Home Air Blast with Twentieth Century fire pot is designed for soft coal of all grades, coke, lignite or wood. A large number of self-cleaning slots and cells are cast in the walls of the Twentieth Century fire pot and extend from the bottom to the top, through which the air is forced by specially constructed grates causing the fuel to burn in a circle. The ash chest and bottom are cast in one piece and the doors are tightly fitted. This stove is richly carved and decorated. It has square base with legs and skirts, elaborate nickel foot rail and brackets that conceal the fire pot, nickel draft registers, large nickel door panel, nickeled steel top band that cannot be broken. handsome gold-plated urn and nickel urn base. One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

MEXICO'S GOLD OUTPUT.

Writing on Mexico's gold output the *Mexican Herald* observes that the official statistics for the last quarter of 1902 show the total value of new gold mined was $3,250,000, or at the rate of $15,000,000 per year, and to this should be added 33 per cent to cover the gold illicitly exported to avoid the payment of the export tax. Practical miners and people familiar with the gold exportation confirm this estimate. The point made by our contemporary is that the gold mined in Mexico is now approximately $20,000,000 annually. In a few years the total annual yield will reach $25,000,000. "We believe," says our authority, "it will go higher inside of eight years. Mexico will lose its distinctive renown as a great silver producing country and enter the list of the countries contributing heavily to the world's stock of the yellow metal. Not only will Mexico have gold enough for her currency needs, to back her silver money, but also to give strength to her banks and so make it possible to drive the interest rate down still further. Good money in abundance will push Mexico ahead in marvelous fashion. We are of the opinion that the new business era there has but begun."

The Cooley & Randegger Mfg. Co., 103 So. Canal St., Chicago, send us a circular describing the Cooley colt, calf and cow weaner. These weaners are made of the best steel wire and are dipped in hot tin after they are made. They are also very solid and strong and the frame wire is braced in such a way that it will not break. It is highly recommended by leading stock raisers everywhere.

The Hardware Record.

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Chicago Retail Hdw. Dealers' Assn.
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Pres. John Popp, Saginaw.
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Treas., Henry C. Weber, Detroit.
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Minnesota Retail Hardware Assn.
Pres., W. H. Tomlinson, LeSueur
V.-P., H. S. Cleveland, Minneapolis.
Treas., W. E. Barto, Long Prairie.
Sec., M. S. Matthews, Mnpls.
Exec. Com., W. H. Tomlinson, Le uear; H. S Cleveland, Minneapolis; F. E. Hunt, Red Lake Falls; Benj. F. Kernkamp, St. Paul; C. H. Hornburg, New Ulm; J. Cowing, Alexandria; C. H. Casey, Jordan; C. F. Ladner, St. Cloud; J. Schmidt, Wabasha; A. T. Stebbins, Rochester; J. McGuire, St. Paul.

Missouri Retail Stove and Hardware Dealers' Association.
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Ex. Com., J. W. Poland, Carrollton; F. N. Kannsteiner, St. Louis; W. T. Shoop, Richmond.

National Hardware Association.
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2nd V.-P., Brace Hayden, San Francisco.
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d V.-P. Alex Meyer, Hastings.
3d V.-P. Frank Hacker, Friend.
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National Retail Hdw. Dealers' Asn.
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V.-P., C. H. Miller, Pennsylvania.
Sec., Treas., M. L. Cor y, Argos, Ind.
Ex. Com., H. G. Cormick, Centralia, Ill.; Sharon E. Jones, Richmond, Ind.; T. F. Ireland, Belding, Mich.; L. Lindenberg, Dubuque, Iowa; A. T. Stebbins, Rochester, Minn.

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Pres., H. N. Joy, Hamilton.
1st V.-P., H. F. Emery, Fargo.
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Sec., C. N. Barnes, Grand Forks.
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Ohio Hardware Association.
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1st V.-P., John Donnan, Richmond, Va.
2d V.-P., E. A. Peden, Houston, Texas.
Ex-Com., Bruce Keener, Knoxville, Tenn.: Chas. Ireland, Greensboro, N C.; O. B. Barker, Lynchburg, Va.

Texas Hardware Jobbers' Assn.
Pres., J. C. Bering, Houston.
1st V.-P., J. Burnside, Ft. Worth.
2d V.-P., J. Taylor, Sherman.
Sec.-Treas., R. Bell, Weatherford.

Wisconsin Hdw. Dealers' Assn.
Pres., L. Findiesen, Green Bay.
V.-P., H. L. McNamara, Janesville.
Sec.-Treas., C. A. Peck, Berlin.
Ex. Com., J. Kornelly, Milwaukee; E. H. Ramm, New London; H. S. Scofield, Sturgeon Bay; R. Murdoch, Beloit.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 44 to 48 inclusive.

The Almand Hardware Co. are a new Monroe, Ga., concern.

The Kruse Hardware Co., Covington, Ky., were victims of fire on Aug. 21st last.

F. H. Schmidt, for a number of years a Grant Pass (Ore.) hardware dealer, has sold out.

The Planters' Hardware Co. are a new Wadesboro (N. C.) concern, capitalized at $25,000.

The Louisville Bolt & Iron Co., Louisville, Ky., will erect several additions to their plant.

Barber & Ross., Washington, D. C., hardware dealers, were victims of a slight fire recently.

R. L. McCormick has purchased the interest of Lee Monosmith in the Villisca Hardware Co., Villisca, Ia.

The Allith Mfg. Co., Chicago, makers of door hangers, etc., have started a branch in Hamilton, Ont.

The Kane & Owens Hardware Co. are a new Weston (W. Va.) hardware concern, capitalized at $20,000.

The Van-Liew Scott Hardware Co., Albany, N. Y., have opened a new store at 93 North Pearl street, that city.

The first carload of nails produced by the Colorado Fuel and Iron Company at Pueblo, Col., was shipped Aug. 8th.

The Union Specialty Co., Chicago, are a new concern capitalized at $2,500, for the manufacture of cooking utensils.

Incendiaries made a recent attempt to blow up the powder house of the Packard Hardware Co., Jamestown, N. Y.

E. J. Strader will handle the ranges made by the Ashland Steel Range Company, Ashland, Ohio, in the state of Illinois.

The Gilbert & Bennett Mfg. Co., wire manufacturers, are erecting a $6,000 addition to their Blue Island, Ill., plant.

S. P. Johnson, a member of the Willmar Hardware Co., Willmar, Minn., was elected an alderman of that city on Aug. 18th last.

John W. Ellison, J. T. Murphy and Walter Gillis are the incorporators of the Ellison Shovel Co., Del Rio, Tex., capitalized at $8,000.

The Illinois Nail Co. are erecting a 50x100 foot addition to their plant at Lessing St. and Chicago Ave., Chicago, at an expense of $15,000.

It is said that the Gasmolorenfabrik-Deutz, near Cologne, Germany, expect to place some 6,000 h. p. gas engines on the market in 1905.

Martin W. Parelius, Geo. A. Vogt, and O. F. Paxton are the incorporators of the Portland Pulley Co., Portland, Ore., capitalized at $20,000.

P. S. Powell, W. W. Powell, F. D. Powell and E. C. Knott are the incorporators of the Powell Hardware Co., Bentville, Ark., capitalized at $10,000.

Ernest Smieding, James Armstrong and John Peterson are the incorporators of the United States

Washing Machine Co., Racine, Wis., capitalized at $2,000.

The Jones Hardware Co., Richmond, Ind., are tunneling the alley between their store and warehouse. This tunnel is 8 feet wide and 7½ feet high.

Chas. E. North, J. Noble Jones, J. W. Oakes, W. J. Thayer and Isaac Meyers are the incorporators of the North Star Irrigation Pump Co., Spokane, Wash.

The establishment of the Simmons Hardware Co., St. Louis, Mo., was slightly damaged by water, caused by fire in the adjoining building on Aug. 21st last.

H. E. Crandell is president, Anthony Lalely is vice-president, F. W. Davis is treasurer and L. C. Devinney is secretary of the Crandall Cutlery Co., Bradford, Pa.

The plant of Parsons, Rich & Co., Newton, Ia., manufacturers of gasolene engines, was destroyed by fire on Aug. 21. The loss was $6,000, with insurance of $17,000.

The Thomas Devlin Mfg. Co. have started work in their Burlington, N. J., plant. They have a foundry 450x125 and an annealing room 250x70 feet in dimensions.

Henry Wilcox is president, W. W. Watt is vice-president and Arthur R. Craig is secretary and treasurer of the Harry Hardware Co., Conway, S. C., capitalized at $8,000.

William V. Bleha, Fred Schneebell, John J. Nelligan, Wm. C. Dashiell and Geo. Thorne, Jr., are the incorporators of the Automatic Door Stop & Lock Co., Washington, D. C.

Thomas Holt, Laura Lyon and David Silver are the incorporators of the Holt-Lyon Co., Tarrytown, N. Y., capitalized at $30,000, for the manufacture of egg beaters and carpet beaters.

S. L. Hill, B. S. Bullis, A. F. Nussbaum, Smith E. Allison and H. M. Perry are the directors of the Chicago Window Screen Co., Joliet, Ill., incorporated with a capital stock of $30,000.

Farwell, Ozmun, Kirk & Co. have a very complete assortment of steel and cast ranges, base burners, Oaks, furnaces, etc., on exhibition at Broadway and Seventh streets, St. Paul, in charge of H. C. Goeltz.

J. G. Johnson is president and G. N. Prentiss secretary of the Racine Steel & Iron Co., Racine, Wis., have filed an amendment increasing the capital stock of that concern from $125,000 to $250,000.

Harrison Bros & Co., Philadelphia paint manufacturers, claim that they were forced out of the Atlanta (Ga.) market for six years on account of the overwhelming competition of cheap and inferior paints.

Samuel Stewart is president, M. B. Priest is vice-president, and A. F. Priest is secretary and treasurer of the Metaloid Mfg. Co., Davenport, Ia., capitalized at $10,000, to manufacture a preparation for cleaning knives and metals.

The J. Stevens Arms & Tool Co., 298 Main street, Chicopee Falls, Mass., are makers of Stevens' double barrel shot gun, which has many points to recommend it to the close attention of the trade. All parts are drop forged and are interchangeable. It is chokebored for nitro powders and is made in 12, 16 and 20 gauge in 28, 30 and 32 inch barrels.

Richard B. Lyman, Edward E. Heldey, Charles H. Swoger, George A. Ricker and Herbert P. Bissell are the incorporators of the American Asbestos & Fire Proofing Manufacturing Co., Buffalo, N. Y., capitalized at $500,000.

John H. Dietrich, Hammond Dietrich, William T. Dietrich, Andrew Dietrich, Adam C. Dietrich and J. Clifford Dietrich are the incorporators of E. Scott Payne Company, Baltimore, Md., capitalized at $30,000 for carrying on a wholesale and retail hardware business.

Lysander E. Hanson of the McKinney Manufacturing Co., Pittsburgh, died at his residence, 1209 Manhattan street, Allegheny, on Aug. 18th. Mr. Hanson was born in Exeter, Me., July 8, 1833, and after an army career engaged in the manufacturing business in Wheeling, W. Va., as secretary of the Wheeling Hinge Co. Later he removed to Pittsburgh, and after a brief service with Lindsay & McCutcheon, he became connected with the McKinney Manufacturing Co., with which concern he remained over 20 years. He leaves two daughters.

The Forbes Hardware Co., Biloxi, Mass., were visited by burglars on Aug. 16th. The thieves threw a brick through a plate glass window, and secured four pistols, valued at about $50. This firm promptly sent out the following description of the goods stolen: "He took a 32 calibre S. & W. No. 242692; a 38 calibre hammerless S. & W. No 154437; a 32 caliber S. & W. new improved side ejector No. 4311 and a Harrington & Richardson 32 calibre."

We think this an excellent idea, as it shows that this firm have kept a systematic account of their goods. Their publication of the numbers of the revolvers stolen, will make it very difficult for the thieves to dispose of same, and is very likely to lead to their capture.

The Sunlight Lava Mfg. Co., Chattanooga, Tenn., makers of bicycle and automobile lamp tips, E. H. gas tips and lava burners, send us a circular calling attention to their Sunlight No. 24 burner. The pillar is of rolled brass. The arms are short and straight and cannot warp out of alignment. The arms are reamed to receive tips which are tapered. In addition tips are cemented with a composition unaffected by heat. Before this cement "sets" tips are aligned for a perfect flame, and the angle of impingement is such that for any consumption there is greatest possible useful candle power in flame, it is claimed. The tips are uniformly machined and pillars heavily nickeled, giving this burner first place so far as refinement of design and pleasing appearance are concerned. In operation, it is guaranteed absolutely.

The F. L. Shafer Co., 263-269 Dearborn St., Chicago, make a very complete line of celluloid specialties for advertising purposes, including blotters, bookmarks, bill of fare covers, business cards, badges, buttons, calendars, for pocket, desk, hanging and for mounting in silver or leather cases, clocks, coin purses, commutation ticket cases, court plaster cases, corks (celluloid top), cash checks, door plates, diaries, dominoes, dials, all kinds, envelope openers (celluloid and

metal), flags, celluloid, game counters, grip tags, handy soap sheets, match safes, mirrors, memorandum books, celluloid and leather tipped, name plates, napkin rings, pin cushions, pin trays, price tickets, postage stamp cases, rules and measures, rubber erasers, restaurant checks, signs in great variety, scales, stick pins, tablets, toothpicks, triangles, tape measures and wine list covers.

NEW DESIGNS IN WARREN SHELVING.

The J. D. Warren Mfg. Co., Chicago, are bringing out some new designs in their hardware shelving shown herewith. In this design the upper cabinet and base are constructed as one, which will be quickly appreciated by all firms wishing inexpensive, neat shelving, this being constructed in such form that while it is suited to hardware stores carrying all styles of stock, yet it is especially suited to stores having small stocks and to buildings that are narrow in space between walls.

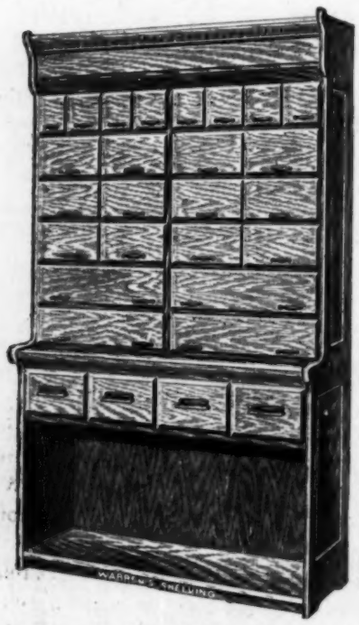


Fig. 1 Warren's Combination Cabinet for Stores and Offices.

This company have provided in this cabinet a style of shelving that retains all the neatness of finish and good quality of work that exists in their other patterns, but at a price that will be popular with all. The upper portion is equipped with drawers assorted in widths from 6 to 24 inches, and 6 inches in height, those in the lower portion being 8 inches in height and 12 inches in width, as illustrated, or assorted in any of the widths given above, suitable for hammers, hatchets, braces, draw knives and tools of similar class, underneath which is an open base with raised bottom for goods in original boxes, such as axes, barn door hangers, scythe stones, powder kegs, etc. If a middle shelf is desired, same will be furnished. They correspond in height to their other bases and cabinets, 7 ft. 1½ inches, and are 4 ft. in width, the sides being flush, so that they abut solidly together, forming any length of shelving desired. This cabinet will also prove an admirable one for implement houses, machine shops, foundries, warehouses and factories of nearly all kinds, as well as individual use where neat, practical compartments are required, to keep miscellaneous possessions in. Inquiries for another purpose have unexpectedly made it in demand for office service, in which to place pamphlets, catalogues and stationery of various descriptions, its proportions being well suited to everything accumulating in an office. When sold for such purposes, the open space is provided, if desired, with sliding doors, either glass or paneled oak, as may be preferred.

Fig. 2. Warren's Combination Sliding Glass Door Cabinet and Base.

The illustration No. 2 is of a similar style with sliding doors in the upper portion and adjustable shelves in lieu of drawers suited to display of tinware, tea and coffee pots, etc., also for guns, hammers, hatchets, draw knives, planes, etc., when equipped with suitable brackets for same.

NEVER-FAIL OIL CANS.

The J. A. Harps Mfg. Co., Greenfield, O., are meeting with marked success in their sales of the "Never-Fail" oil cans for gasolene, kerosene and all light-bodied oils and liquids. These cans have many points to recommend them to the trade and are offered at attractive prices. This firm give the most effectual of all guarantees, as they pay cash for every one of these cans that is returned to the dealer by a customer as unsatisfactory.

RAFF'S PATENT AIR PRESSURE SYSTEM.

Moyer & Raff, Montour, Ia., are the patentees and sole owners of Raff's patent lighting system. By closing the valve in pipe connecting the two tanks of the double tank, the air is cut off from the fuel tank while the same is being refilled. The fuel tank is provided with a glass gauge, showing the amount of fuel contained therein, at all times reminding us when it is necessary to refill the tank. The pressure or air tank is also provided with a pressure gauge to show amount of pressure in same. The pressure tank is four times as large as the fuel tank, for the purpose of keeping the pressure on fuel tank more even. It only takes three or four pounds of pressure to empty the fuel tank. So by starting with thirty pounds pressure one will have twenty-six to twenty-seven pounds left when fuel tank is empty.

A press dispatch dated August 27 states that the steel makers of Germany have reached an agreement not to sell partly finished goods below certain prices. The object is to obtain better returns for the product and to preclude German finished goods coming into competition abroad with foreign work manufactured from German material exported at lower prices than sold at home.

Advertising Department.

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

The advertisement of Buckingham & Hair has an unusually attractive border whose suggestiveness of the links of a chain at a distant glance makes it unusually appropriate for the hardware dealer. This advertisement suffers as it is a miniature reproduction of a job lot page of type specimen book, and too many styles of type are used in this advertisement. The sense of proportion in the advertisement is bad, as in attempting to display all the lines none of the lines receive as good a display as they should. The words

CITIZENS TELEPHONE NO. 31.

BUCKINGHAM & HAIR,

Milford, Ohio,

WILL SAVE YOU BIG INTEREST ON MONEY IF YOU BUY YOUR

Lumber,
Builders' Hardware,
Mantels, Glass,
And Paint
OF THEM.

SEND US YOUR BILLS FOR FIGURES.
IT WILL PAY YOU AND DO US GOOD.

"of them" come in very clumsily, and the advertisement should have read "Will save you big interest when buying lumber, builders' hardware, mantels, glass, paint, etc.

Regenold & Merrill, Swanton, Ohio, have a fair display of their advertisement, but outside of the main

Majestic Ranges

Malleable Iron and Steel Ranges, practically non destructable, air tight joints, Insuring best draft, best baking, saves fuel, is positively guaranteed. Sold at a moderate price. See this Range at

REGENOLD & MERRELL

SWANTON, OHIO.

error of the use of types which do not harmonize in the headline, and for the signature, the main fault of this advertisement is its lack of proportion. The subject matter of the announcement is in much too large type, and is run together, without any attempt to be pleasing in a literary sense, or even to present the matter in a grammatical form. This is pardonable in exceptional instances, as perhaps in an announcement where space is extremely valuable, but if the present advertisement were set up as it should be, there would be space to spare for presenting it more attractively.

McIntosh Bros., Botineau, N. D., have an advertisement which is susceptible of improvement in several details. For instance, we do not believe the headline, "It takes money to buy hardware," is one which is

...IT TAKES MONEY...

To Buy Hardware.

Then buy Hardware where it costs the least money. That's at our store. To be convinced—call. We sell the best to be had in our line at the Lowest Possible Prices.

McINTOSH BROS.,

LEADERS IN HARDWARE.

Bottineau, N. D.

calculated to attract attention. It would rather seem to repel than to attract customers. The idea of the advertisement is a very excellent one, but the press work is of an inferior order. In the first place the rule work is poorly soldered together, and then again the cut is so badly underlaid that it appears as a black and white blur, and it is only by a very close scrutiny that the name of the maker can be ascertained. This is undoubtedly due to carelessness of the local printer, as the cuts of this firm as shown in the past in circulars, trade papers, etc., have always shown up clearly and distinctly.

EVERY BUSINESS MEN OUGHT TO HAVE ONE.

H. F. Dallman, Clinton, Wis., writes: "I have received your Manual of Business, and after carefully looking it over must say that every business man ought to have one. It teaches penmanship, bookkeeping, debts and collections, banking, contracts, postal regulations, discount and interest, etc."

Heating and Ventilating

The Supervising Architect, Washington, D. C., will receive bids until Sept. 22d for heating the new post-office at Martinsville, Va.

Jesse O. Randall, Calvin D. Eastman and F. C. Somers are the incorporators of the Randall Heating & Ventilating Co., Silver Springs, N. Y., capitalized at $1,000.

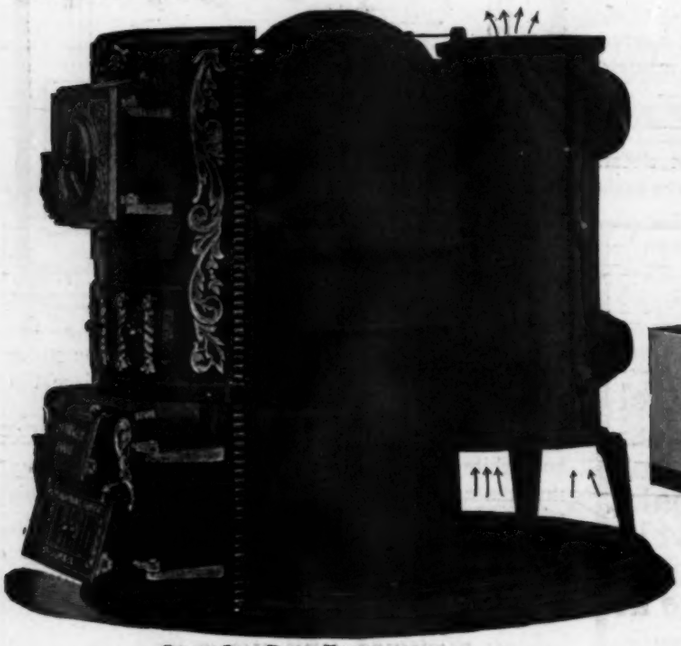
The Board of Arbitration on the question of the pay of steam fitters' helpers at Washington, D. C., decided to give them an increase in pay from $1.60 to $2.00 per day.

It is said that the Southern Metal & Mfg. Co. have been organized at Grand Tower, Ill., for the manufacture of plumbing supplies. A number of St. Joseph (Mo.) plumbers have taken stock in the company and will share in the profits.

The Magee Furnace Co., 32-38 Union street, Boston, Mass., are manufacturers of the Magee Mystic Hot Blast furnaces, which are gas and dust tight. The fire pot is heavy and durable, connected by cup-joints in the center. The grate is of the revolving Dockash type. This firm would be pleased to send the trade their furnace catalogue on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

CROWN LOW DOWN FURNACE.

The March-Brownback Stove Company, Pottstown, Pa., are manufacturers of the Crown Low-Down furnace shown herewith.



Crown Low Down Furnace.

This furnace is designed for burning either hard or soft coal. The drum construction is a leading feature. It is hollowed through the center and throws up heat in large volumes. Other features are the smoke curtain and the automatic slide opener.

It is made circular or oval in form and either with heavy steel or cast drum. Its staunchness makes repairs necessary only at long intervals and they are easily put in place by ordinary help.

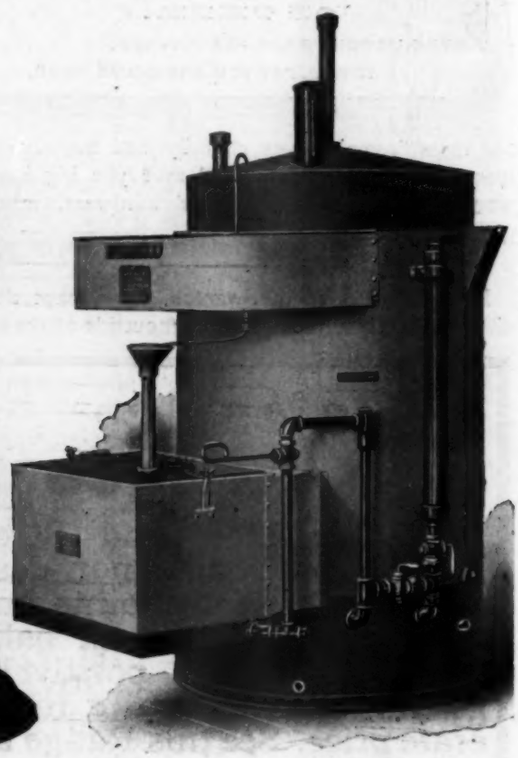
"THE CARTER ACETYLENE" GAS MACHINE.

The Niagara Falls Acetylene Gas Machine Company, Niagara Falls, N. Y., are manufacturers of the "Carter" acetylene gas machine shown in the accompanying cut. This apparatus is constructed of heavy galvanized sheet steel, all riveted work.

The Underwriters' Bureau of Fire Protection Engineering has passed upon and permit the use of the "Carter" acetylene gas generators. Owing to the small space occupied by the machine it can be set in any convenient place in the cellar or any frost-proof building outside.

In this generator the carbide is contained in the generator in trays having more or less compartments according to the size of the generator, each compartment containing about one pound of carbide. The flow of water from the water tank is regulated by the rise and fall of the holder when its lowest point. The water flows into the first cell, thoroughly extracts every particle of gas from the carbide and floods it with water before attacking the next cell, and so on until the generator is exhausted.

It will be understood from this principle that only one pound of carbide is at work at one time. The balance of the carbide in the generator being in a dry state, can make no gas. It is stated this apparatus, as to capacities, is well within rating, and in fact can be depended upon to carry twenty-five per cent of an overload for one or two hours, without fear of overproduction and waste of gas by blowing off after consumption of gas is stopped.



The "Carter" Acetylene Gas Machine.

One extra generator tray is sent with each machine, so that when the upper tray is exhausted it can be removed, the new tray placed on the bottom and the partly consumed tray on the top. The exhausted tray can then be emptied and recharged at leisure.

CHAMPION HOT WATER COMBINATION HEATERS.

Frank D. Stolz, 156 Webster avenue, Chicago, is offering the trade the Champion hot water combination heater shown in the accompanying cuts.

Fig. 1 Base Section.

These heaters are designed to be used in connection with hot-air furnaces to heat rooms which are difficult to heat with hot air, enabling the householder to thoroughly warm all rooms either by hot air or hot water.

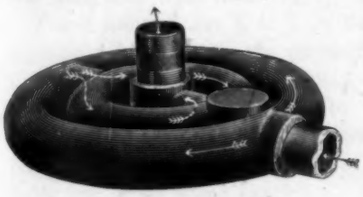


Fig. 2 Ring Section.

The base section with opening in front, which is designed to be placed opposite feed door, can be located directly at the top of the firepot, in which position its large surfaces are exposed to the hottest effect of the fire, making it a powerful heater.

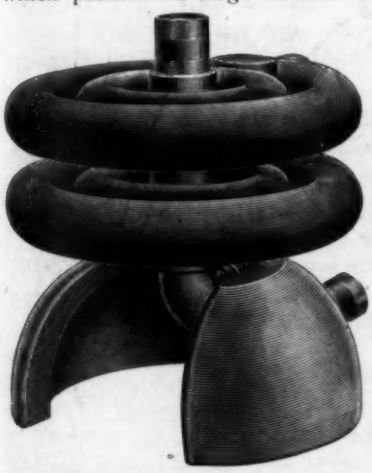


Fig. 3 Base and Two Rings.

The ring section is used as an individual heater, or one or more ring sections can be used in connection with base section as shown in Fig. 3, where a hot-water heater of large capacity is required.

These heaters are made in five diameters (12 to 23 inches), and can be furnished in thirty styles with capacities from 50 to 600 ft. A neat pamphlet describing the heater will be furnished the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

RADIATOR BUSINESS IS GOOD.

President C. M. Woolley of the American Radiator Company, Lake and Dearborn streets, Chicago, is quoted as follows in a recent newspaper interview: "The radiator business is good and sentiment in our line is more hopeful than it was two weeks ago. Business is well maintained. The real busy season commences October 1. Our full force of traveling men is on the road and they report that labor troubles have stopped building activity to some extent, but the volume of business in the main over the country has been excellent. Our foreign factories advise us that continental orders are growing steadily and solidly. There is nothing spectacular in the growth, as that is not the way they do things over there, but it is at a rate immensely pleasing to us. We have not discussed the question of placing our common stock on a remunerative basis for some time. Any favorable action on the same rests with our directors. The steadiness of our stock during the recent slump has, I understand, caused much favorable comment."

INDEPENDENT STOVE PIPE RADIATOR.

The Independent Register Co., Cleveland, O., send us a pamphlet describing their Independent stove pipe radiators. In the Independent square radiators the steel shell is filled with radiating tubes, one and one-half inches in diameter and from seven and a half to eight and a half inches long, according to the size of the radiator. These tubes pass from the back to the front of the smoke chamber and are open at both ends. In the rear of the smoke chamber is an air shaft, closed at the top and open at the bottom, which draws the air from the floor where it is always coolest, and feeds it to the radiating tubes. On its way to the chimney every particle of the heat and smoke must pass over these tubes, with their enormous radiating surface, and when the heat and smoke is through with all these tubes and has reached the top of the radiator it is mostly all smoke—the heat has been caught by the tubes, each one of which becomes a separate radiator, and the air passing through them is changed from cold to hot and instead of going out of the chimney, the heat is on its way out into the room; and it keeps at it just as long as there is any fire in the stove.

By running the eight radiating tubes in the Independent round radiator from the outside at the bottom, to the center of the radiator and then back to the outside at the top, a large portion of the radiating surface is placed directly in the course of the smoke travel, so that the waste heat from the stove must travel over each of the eight tubes twice before going to the chimney. This form of construction forces the waste heat away from the center and against the sides of the radiator, thus making the side surface unusually effective and the entire surface of the radiator hot radiating surface.

One of these circulars will be sent the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

The S. Obermayer Co., Cincinnati, Chicago and Pittsburg, are sending out some novel advertising matter, including pasteboard *fac similes* of cans of National iron filler cement, barrels of No. 702 pure Ceylon plumbago and Frazer's rapping plates and lifters.

Tinshop.

RULE FOR CONSTRUCTING AN UNEQUAL Y BRANCH WITH ELBOW CONNECTION.

BY W. H. HAYES.

(Continued from Page 36, Issue of Aug. 22.)

Now draw a dotted line parallel with the line D′ B′ from the point (14) to intersect the dotted line (13)—13.

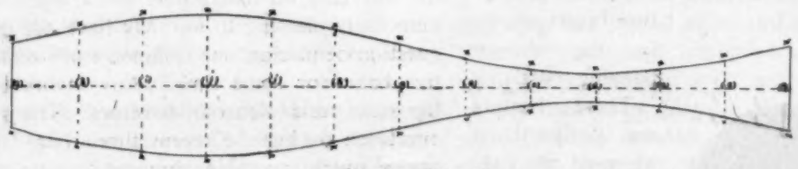
The line marked R′ S′ o′ P′ is exactly the same as the line in "Side view" and "Top view" (g)′ (8)′ 9′.

The line at right angles from the point S′ also marked (18) is the same as the dotted line in Top view, from (8) to F°.

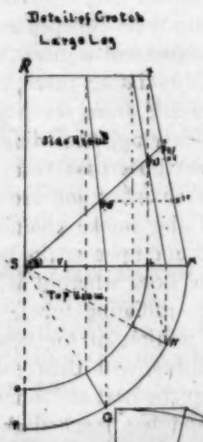
The points (14), (12), (10) and (8) are the same and are got the same way.

The quarter circle P to M is the same as the quarter circle 9 to F° in top and side views.

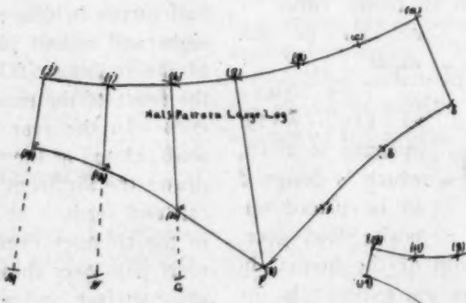
In this detail we are showing the student a view of



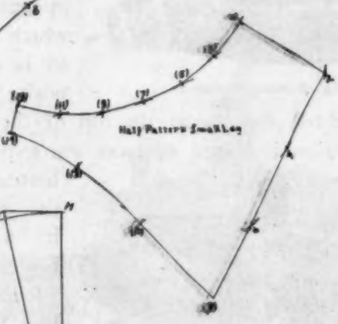
Side Seam Elbow Pieces



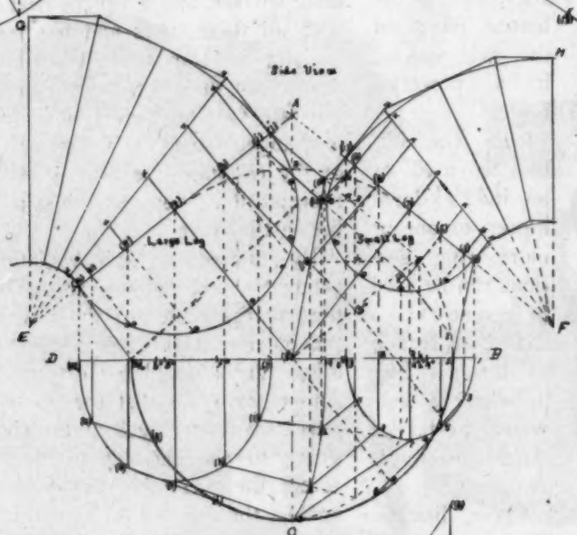
Detail of Crotch Large Leg



Half Pattern Large Leg



Half Pattern Small Leg



Side View

Top View

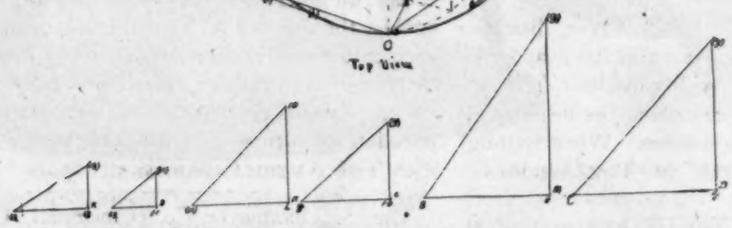


Diagram of Triangles

Another from (12) to the line (11)—11.

Another from (10) to the line (9)—9.

Now we will call the student's attention to the drawing marked "Detail of Crotch" large leg.

the inside portion of the large leg, that which has to do with the mitre line, more plainly than he can see it in the projection. This will not seem necessary to the advanced student.

The quarter circle o L shows a "plan" quarter view of the top of the leg looking at it from a direct focus, the quarter circle P M shows the bottom.

The points are divided the same as the "large leg" in side view.

Now from the points (14), (12), (10) and (8) draw dotted lines at right angles to the line R′ S′ each of which shall intersect the line X′ M′.

The student will see that the inside portion of the "large leg," (g) to (j) and (8) to F°′, is concentric, that is, a part of a central taper.

Now this Y branch is a 4″ by 3″ by 2″. We will take the large leg first.

A taper 4 x 3. Elevation and plan of ¼ of it is shown in detail of crotch x with the line (14) — (8) as the mitre cut.

The circumference of a 4″ pipe we will say is 12½″. Set off 12½″ on a straight line, ¼ of it is 3⅛″, divide 3⅛ into 3 equal parts as the quarter in the drawing is divided and keep that compass set for future use. The small diameter is 3″, which we will call in circumference 9½″; ¼ of 9½″ is 2⅜″. Divide 2⅜″ into 3 equal parts and you have the divisions of both top and bottom circles.

The distance from X to L in detail of crotch is the straight height. Take the distance from M to X and set it up and on its line (j)′ m′.

Take the distance from L to N and set it from L to the point V. Now set your compass from V to X. Now with the distance from V to X sweep from (j) to N and from M to (i).

Now with your dividers, that are set for the 3″ circumference, sweep from j until you intersect the other sweep at (i). With the large space sweep from M to N. Then with the same distance from V to X sweep from N to (h) and from (i) to G′. Space off top and bottom as before.

Sweep again from (h) to (8) and from G to (g) and space off top and bottom. Draw a line from (g) to (8), one from (h) to G, one from (i) to N and one from (j) to M.

Now take the distance from X to (14) on the line X M in "detail of crotch," and set it off on the line (j) M as shown by the point (14).

Now from X to XI set off on the line (i) N as shown by the point 12.

And from X to XII set off on the line h′ G′ as shown by the point 10.

The line (g) P, which is also marked (8) at the bottom, should be the same length as the line X′ M′.

. Now take the distance from g to f in "top view" and set it off on the line D′ B′ using the base of the dotted line g′ as a center as shown by the point f°.

From f° set your divider up to g on the line E′ A′ With the distance thus obtained set your divider at (g) in "half pattern, large leg" and sweep out to f in the same.

Now with the dividers which you have set for the large spaces sweep from the point P until you cross the other sweep at f. Now take the distance from (f) to(e) in "top view" and set it off from the dotted line (e) on the line D B as shown by the point f°. From f° set your dividers to the point e on the line E′ A′, then from f in "half pattern of large leg" sweep up to the point (e).

Then with the dividers you have set for the small space sweep from (g) to (e). Continue this until you have reached the point (a)′ b′. Draw a line from (a) to b and from j to (14) and free hand lines through the other points and you have a half pattern of the large leg. The other is a duplicate of this, all laps to be allowed. They must be rolled right and left.

Now take the distance from (13) to (14) in "top view" and set it off as shown by (13) and (14) in "half pattern, small leg." Now take the distance from (13) to K on the dotted line (13) and set it off on a vertical line as shown by 13 and K in "diagram of triangles." Take the distance from 13 to 12 in top view and set if off on a line at right angles to 13′ K′ as shown by 13—12 in the diagram.

Now set your dividers from 12 to (13) and sweep from the point 13 in "half pattern, small leg" down to the point (12). Take the distance from (14) to (12) in "half pattern, large leg" and sweep from (14) in "small leg" until you cross the other sweep at (12).

Now take the distance from 12 to 11 in "top view" and set it off on a horizontal line as shown by 12′ 11′ in diagram. Now take the distance from (11) to B in the dotted line in "side view" and set it off on a vertical line at right angles to 12′ 11 in "triangles" as shown.

Now take the distance from (11) to 12 and sweep up from 12 in "half pattern, small leg." The circumference of this small leg must be divided in this case into 12 parts as explained before. Set your compass the distance of one of these parts and sweep from (13) to (11) in "small leg" as shown.

Now take the distance from 11 to 10 in top view and place it on a vertical line as shown by 11 and 10 in "triangles." Now take from (11) to L on the dotted line (11) in top view and put it on a line at right angles to 11 and 10 as shown by 11 L in "triangles." Sweep this from (11) in "small leg" down. Take the distance from (12) to (10) in "large leg" and sweep it from (12) in small leg until you intersect the other sweep at (10). Continue this until you have reached the points (7) and (8). The method used to develop the leg from 7 and 8 on to the end is the same as the one used in "large leg."

This is also a half pattern with laps to be allowed. Now we have set two 45° angles on this Y branch to connect it to 2 pipes, each of which shall run at right angles to the line A C. These angles to be made in 3 pieces.

It will be noticed that the distance from g to E on the line A E and from 7 to F on the line A F are the same. The points F and F are the points from which we get our radius. It will also be noticed that the radius of the large angle is smaller than that of the small. This is to make our pipes central.

Set your dividers from F to 13 on the line A′ F′ and sweep out to H. Draw a line from F to H at right angles to the line D′ B′ and passing through the point F.

Now divide the circle from (13) to H into 4 equal parts. The line from X to F gives you the rise of

your elbow. Draw lines from (13) and (1) on the line A′ F′ at right angles to A′ F′ until they intersect the line X′ F′. Continue the dotted lines 3—0′, 5—0′, 7—0′, 9—0′ and 10—0′ until they each intersect at the points X as shown.

Now construct the line from (7) to (7) in the "side seam elbow" pattern, which shall be the circumference length of the elbow piece attached to the small leg. Divide the same into 12 equal parts. At each of these points construct lines at right angles that shall cross the line (7) to (7) and continue indefinitely.

Take the distance from (7) to X in side view and placing your dividers on the parallel line (7) to (7) space it above and below as shown by the dotted line (7) X in the center and on each end as shown. Take the distance from (9) to X in side view and space it as shown. Continue spacing until you have formed the curve as shown by the points X, then draw lines through each, all laps to be allowed.

This pattern forms an inside piece. Cut it in two on the center line and you have the end piece.

TWENTY-TWO CARS OF CORRUGATED SHEETS.

The Berger Mfg. Co., Canton, O., recently made an extensive shipment of corrugated galvanized sheets to the Philippine Islands.

This shipment made up consisted of 22 carloads, 60,000 pounds capacity of each, total 1,320,000 pounds, making 660 tons, or 1,039,400 square feet. Sheets, if placed end to end, would cover a shed 108 miles in length by 24 inches wide. This order was received and executed within twenty days after its receipt and delivered at New York port in three days after leaving their works. The care with which the work was done and the dispatch in completing the contract have placed this concern in an enviable position in respect to future contracts. If any larger shipments of this material have ever been made they have escaped o attention.

Large Shipment of Corrugated Sheets.

TIN PRODUCTION OF THE WORLD.

In 1875 the world's output of tin amounted in roun figures to some 40,000 tons, of which 10,000 tons can from the Straits Settlements, 10,000 tons from Corn wall, 8,000 tons from Dutch East Indies, 11,000 fro Australia and the insignificant residue from Soutl America and elsewhere. To-day the annual output ex ceeds 75,000 tons, and of this more than 46,000 tons—over 61 per cent of the whole—come from the Straits Settlements, while Cornwall produces now only 5,000 tons and the Australian output has similarly declined. On the other hand, the Dutch East Indies export some 14,000 tons and Bolivia has an output of 5,000 tons. There are a few other places whence tin is shipped to the world's markets, but the amount of their production is comparatively insignificant. The fact which is of importance is that the tin produced by the Malay states under British protection exceeds the total output of the world in 1875 by more than 6,000 tons and represents to-day considerably more than half of the supply of the metal now annually available.—London Times.

NOTES AND QUERIES.

SOLDERS FOR ALUMINUM.

From O. A. Cramer, Monte Vista, Colo.

Would like some solders for aluminum?

Ans.—No. 1—Zinc, 80 parts; copper, 8 parts; aluminum, 12 parts. No. 2—Zinc, 85 parts; copper, 6 parts; aluminum, 9 parts. No. 3—Zinc, 88 parts; copper, 5 parts; aluminum, 7 parts. No. 4—Zinc, 90 parts; copper, 4 parts; aluminum, 6 parts. No. 5—Zinc, 94 parts; copper, 2 parts; aluminum, 4 parts.

The solders are made by first preparing an aluminum alloy and mixing this with the required quantity of zinc. The copper is first melted and the aluminum, divided into three or four portions, is gradually introduced into the melted copper, a perfect mixture being effected by stirring. When the last portion of aluminum has been added throw in the zinc, and at the same time some fat or resin, then stir quickly and briskly, immediately remove the crucible from the fire and pour the alloy into iron molds previously rubbed with coal tar oil or benzine. For soldering aluminum with the blow-pipe the following composition is recommended: Silver, 10 parts; copper, 10; aluminum, 20; tin, 60; zinc, 30. For soldering with the common soldering iron use: Tin, 95 parts; bismuth, 5; or tin, 97 parts, and bismuth, 3. The flux to be used in all cases is either paraffine, stearin or vaseline. The articles must be well cleaned before soldering and heated just enough to make the solder adhere.

EVERLASTING CHIMNEY CAP.

From Geo. L. Fisk, Ellisville, Ill.

Who makes the Everlasting chimney cap?

Ans.—Schreiber & Conchar Mfg. Co., Dubuque, Ia., and the Lyons Specialty Co., Lyons, Ia.

DIX SLIDING DOOR HANGER.

From Ray Brothers, Belvidere, Ill.

Who makes the Dix sliding door hanger?

Ans.—Dix Mfg. Co., Baltimore, Md.

CHICAGO WASHING MACHINE.

From Yokom Bros., New Hartford, Ia.

Where can we buy the Chicago washing machine?

Ans.—Famous Mfg. Co., East Chicago, Ind.

ADDRESS OF STANDARD OIL CAN CO.

From N. W. Deering & Son, Atlantic, Ia.

What is the address of the Standard Oil Can Co.?

Ans.—Toledo, Ohio.

BUFFALO STOVE REPAIR HOUSE.

From C. C. Griffin, Altoona, Pa.

Would like address of a Buffalo stove repair concern.

Ans.—O. Y. & D. H. Donaldson, 50 South Division St., Buffalo, N. Y.

REPAIRS FOR OLIVER AND YALE PLOWS.

From Cady & Forbes, Belleville, Mich.

Where can we buy repairs for Oliver and Yale plows?

(Can any of our readers furnish the desired information?—Ed.)

"KEDZIE" FILTER.

From C. P. Brainard, Devils Lake, N. D.

Where can we buy the Kedzie filter?

(Can any of our readers furnish the desired information?—Ed.)

ITEMS.

It is said a tin smelter is being erected at Tinton, S. D.

The Waukesha Sheet Steel Co., Waukesha, Wis., will resume work this fall.

It is said that the Advisory Board of the Amalgamated Association of Iron, Steel & Tin Workers will shortly hold a meeting for the purpose of declaring the non-union mills of the American Sheet Steel Co. open mills.

The upper ten mills of the Shenango plant of the American Tin Plate Co. will be ready for operation by Sept. 1st.

Tin plate workers who invested in the new Juniata steel plant at New Castle, Ind., have brought suit for an accounting.

Wm. T. Disley, for a number of years a manufacturer of sheet metal cornices, Waterbury, Conn., died on Aug. 14th last.

The American Sheet Steel Co.'s Youngstown, (Ohio) mill resumed operations on Aug. 17th after a week's shut down.

The Laughlin tin plate plant at Martin's Ferry, Ohio, paid out $54,000 on Aug. 15th. This was the largest pay day in its history.

It is said the South Connellsville (Pa.) plant of the American Tin Plate Co. has orders on hand that will keep it running for nine months.

The strike of the tin house workers of the South Sharon, Pa., plant of the American Tin Plate Co. has been settled, the men having been out only three days.

Chas. Reichmann, for a number of years a manufacturer of sheet metal goods, at Brooklyn, N. Y., died on Aug. 18th, at 417 Kosciusko street, that city, in the 86th year of his age.

The National Enameling & Stamping Co. are making an addition to their Baltimore (Md.) plant in the shape of a three-story brick and iron building, 115x 170 feet in dimensions.

The McClure Co., Pittsburg, send us a circular giving a few facts about McClure's genuine charcoal iron re-dipped roofing tin. Every sheet of this tin is guaranteed to wear 15 years.

T. J. Shaffer, president of the Amalgamated Association of Iron, Steel & Tin Workers, in a recent interview reports that the condition of the association is excellent. All mills are working on full time, and the men are earning good wages.

H. M. Norton is president, M. W. Edgar is vice-president and secretary and J. J. Moser is treasurer of the Norton-Edgar Can Co., Ludlow, Ky., capitalized at $100,000, for the manufacture of can and metal specialties and machinery and dies for the same.

At Alton, Ill., A. J. Degenhardt and James F. Barrett have granted the demands of the tinners for an increase of 5 cents per hour, and a reduction of working hours from 9 to 8 per day, while the other firms state that they will go out of business before doing likewise.

A number of members of the Master Sheet Metal Workers' Association have been engaged in roofing the Legallet-Hellwig Co.'s tannery in San Francisco, owing to a strike in that city. Many of the bosses have not handled the tools of the trade during the past 30 years, and were enthusiastic over their ability to successfully compete with the striking workmen. The sheet metal workers of that city have struck for an advance of $1 a day over their present wages of $4, and have also asked for a half holiday on Saturdays.

ADVERTISERS' INDEX.

ALPHABETICAL LIST.

Acorn Brass Mfg. Co 59
Atchison, The Robert Perf'd Metal Co 57
American Cutlery Co 59
American Furnace Co., The 16
American Radiator Co 2
American Steel Roofing Co 55
American Tent & Awning Co 66
American Tinplate Co 54
Anton, George 62
Atkins, E. C. & Co., The 68
Atlas Bolt & Screw Co 1
Atlas Mfg. Co 68
Auer Register Co 22
Avery Stamping Co., The 61
Barnett, G. & H. Co 1
Beckwith, Estate of P. D 24
Benbow-Brammer Mfg. Co 63
Berger Bros. Co 57
Berger Mfg. Co 57
Bergstrom Bros. & Co 16
Bischoff, Fred. F. & Co 65
Black Silk Stove Polish Works 53
Blacklock Foundry Co 65
Blanke & Hauk Supply Co 64
Boss Washing Machine Co 63
Boynton Furnace Co 19
Brammer, H. F. Mfg. Co 63
Brand Stove Co 13
Brauer, A. G 52
Bridgeport Chain Co 61
Bridgeport Crucible Co 53
Bridgeport Gun & Implement Co. 2
Brilliant Gas Lamp Co 59
Briscoe Mfg. Co 60
Brucker, M 52
Buckeye Paint & Varnish Co 54
Burton, The W. J. Co 8
Canton Steel Roofing Co 56
Champion Steel Range Co 12
Chicago Furnace Supply Co 19
Clark, Geo. M. & Co 10
Clark Novelty Co 64
Clark, Quien & Morse 55
Clayton & Lambert Mfg. Co 54
Colebrook, W. H. Sons & Co 9
Cole Mfg. Co 8
Columbus Bolt Works 1
Connors, Wm. Paint Mfg. Co 1
Cooley & Randegger Mfg. Co 65
Cooney & Geiger 68
Cope, Geo. W. Pattern Works 52
Cortright Metal Roofing Co 2
Cosby, Chas. H 13
Davison Mfg. Co 63
Denning Fence Works 64
Detroit Heating & Lighting Co 18
Disston, Henry & Sons 66
Dixon, Jos. Crucible Co 50
Dreis: Andrews & Krump 55
Dust, Wm. T. Co 52
Eclipse Stove Co., The 9
Eller, J. H. & Co 56
Enterprise Mfg. Co. of Pa 67
Farwell, Ozmun, Kirk & Co 64
Faultless Mfg. Co 7-19-63
Ferrosteel Co 22
Forest City Foundry & Mfg. Co 14
Forest City Paint & Varnish Co 54
Friedley & Voshardt 56
Front Rank Steel Furnace Co 18
Fulper Pottery Co 62
Galesburg Cornice Works 57
Gagan, J. M. & Co 59
Garry Iron & Steel Co 54
Geneva Tool Co 1
Germer Stove Co 15
Globe Ventilator Co 68
Gobeille Pattern Works 52
Ham, C. T. Mfg. Co 60
Hart & Cooley Co., The 23
Harps Mfg. Co., J. A 64
Hart & Crouse Co 18
Helios-Upton Co 53
Henry & Scheible Co 20
Hess-Snyder Co., The 11
Hoehn, Fred 58
Hoffman, Geo. W 53
Holliday Mfg. & Engineering Co 61
Hopkins & Allen Arms Co 50
Horigan Supply Co 60
Howes, S. M. Co., The 52
Huffman, Theo. P. & Co 68
Hurwood Mfg. Co 66
Illinois Roofing & Supply Co 68
Independent Register Co 22
Isele, A. W. & Son 50
Joliet Stove Works 4
Jones, J. H. & Son 2
Kewanee Boiler Co 2
Kimball Bros. Co 65
Kohler, F. E. & Co 60
Kontny, John 5
La Crosse Steel Roofing & Corrugating Co 55
Lee-Glass-Andreesen Hdw. Co 67
Lennox Mfg. Co 13
Leonard Mfg. Co 65
Lufkin Rule Co 66
Magee Furnace Co 15
March-Brownback Stove Co 17
Mayer & Co 2
McClure & Co 68
Mersfelder Pattern Works 52
Meyers, The Fred J. Mfg. Co 58
Meyer Bro. & Co., F 17
Milwaukee Corrugating Co 55
Milwaukee Pattern Works 52
Monroe Foundry & Furnace Co 18
Montross, Richard W 61
Morrill, Chas 58
Mueller, L. J. Furnace Co 13 23
Nat. Enameling & Stamping Co 58
Niagara Falls Acetylene Gas Generator Co 59
Nicholson File Co 1
Nickel Plate Stove Polish Co 12
Nineteen Hundred Washer Co 62
Nineteen Hundred and Three Washer Co 63
Norris & Loring Hdw. Co 50
North Bros. Mfg. Co 61
Osborn, The J. M. & L. A. Co 56
Osgood Scale Co 1
Peck, C. A. Hdw. Co 66
Peck, Hubert S 49
Peerless Steel Range Co 11
Pelouze Scale Co 59
Perkins, J. L. & Co 1
Peters Cartridge Co 2
Pittsburgh Stove & Range Co 6
Plume & Atwood Mfg. Co 61
Powers Bros 1
Pullman Mfg. Co 68
Quaker Mfg. Co 19
Reissmann, F 66
Richardson & Boynton Co 16
Robinson Furnace Co 17
Rochester Radiator Co 8
Royal Stove & Range Co 6
Sayre Stamping Co 52
Schwab, R. J., & Sons Co 22
Seeger, Chas 54
Seither-Cherry Co 64
Shaffer, F. L. Co 50-65-63
Sitterly Novelty Works 61
Smith & Anthony Co 12
Smith, Chas. Co 9
Smith & Hemenway Co 61
Sperry, D. R. & Co 2
Stanley Rule & Level Co 66
Stanton Heater Co 13
Sterling Foundry Co 20
Stevens Arms & Tool Co 68
Stevens, F. B 53
Stimpson, Edwin B. & Son 57
St. Louis Electrotyping & Foundry Co 54
Stolz, Frank D 8
Stuber & Kuck 60
Swaine, Fred. J. Co 54
Symonds Mfg. Co 23
Taylor & Boggis Foundry Co 65
Tower Mfg. Co 60
Travilla, M 12
Triner Scale & Mfg. Co 59
Tubular Heating & Ventilating Co 20
Union Brick Bond Co 59
Voss Bros. Mfg. Co 62
Walworth Run Foundry Co 23
Warren, J. D. Mfg. Co 50-53-55
Weber Gas and Gasoline Engine Co 52
Weiss, H. & Co 50
Weller Pattern Co 52
Welling-Bowers Mfg. Co 68
White Stove Co., Thos 3
White Lily Washer Co 62
Williams Stove Lining Co 53
Willard, Wm. G 12
Willson & Co., H. B 61
Wilmot Castle Co 8
Young Mfg. Co., The 57

CLASSIFIED LIST.

Advertising Novelties.

Shaffer, F. L. Co 50-65-63

Agricultural Tools.

Geneva Tool Co 1

Architectural Sheet Metal Work.

Berger Mfg. Co 57
Canton Steel Roofing Co 56
Friedley & Voshardt 56
Galesburg Cornice Works 57

Asphalt Roofing.

Perkins, J. L. & Co 1

Bolts.

Columbs Bolt Works 1

Brick Handler.

Union Brick Bond Co 59

Caldrons.

Sperry, R. D. & Co 2

Carpenters' Tools.

Hurwood Mfg. Co 66
Smith & Hemenway 61
Stanley Rule & Level Co 66

Carpet Stretchers.

Holliday Mfg. & Engineering Co 61
Montross, Richard W 61
Sitterly Novelty Works 61

Ceilings—Steel.

Berger Mfg. Co 57
Canton Steel Roofing Co 56
Eller, J. H. & Co 56
Friedley & Voshardt 56
Illinois Roofing & Supply Co 68
La Crosse Steel Roofing & Corrugating Co 55
Milwaukee Corrugating Co 55

Chains.

Bridgeport Chain Co 61

Conductor Pipe.

Clark, Quien & Morse 55
Garry Iron & Steel Co 54
Illinois Roofing & Supply Co 68
La Crosse Steel Roofing & Corrugating Co 55

Corrugated Iron.

Garry Iron & Steel Co 54

Cream Separators.

Blanke & Hauk Supply Co 64
Seither-Cherry Co 64

Cutlery.

American Cutlery Co 59
Farwell, Ozmun, Kirk & Co 64
Smith & Hemenway Co 61
Triner Scale & Mfg. Co 59

Cut Offs.

Cooney & Geiger 68
Young Mfg. Co 57
Welling-Bowers Mfg. Co 68

Dampers.

Sayre Stamping Co 52
Howes, S. M. Co 52

Door Hangers.

Bischoff, Fred. F. & Co 65

Drills.

North Bros. Mfg. Co 61

Elevators.

Kimball Bros 65

Excelsior.

Huffman, Theo. P. & Co 68

Enamel Ware.

Nat'l Enameling & Stamping Co 58

Faucets.

Clark Novelty Co 64

Fencing

Denning Fence Works 64

Files.

Barnett, G. & H. Co 1
Disston, Henry & Sons 66
Mayer & Co 2
Nicholson File Co 1

Filters.

Fulper Pottery Co 62
Seeger, Chas 54

Fire Arms.

Bridgeport Gun & Implement Co 2
Hopkins & Allen Arms Co 50
Peters Cartridge Co 2
Stevens, J. Arms & Tool Co 68

Fire Pots.

Clayton & Lambert Mfg. Co 54

Fixtures—Office.

Leonard Mfg. Co 65
Warren, J. D. Mfg. Co 50-53-55

Flour Sifters.

Meyers, The Fred J., Mfg. Co 58

Flue Stoppers.

Stuber & Kuck 60
Welling-Bowers Mfg. Co 68

Foundry Supplies.

Stevens, F. B 53

Fruit Press.

Enterprise Mfg. Co. of Pa 67

Furnace Cement.

Colebrook, W. H. Sons & Co 9
Connors, Wm. Paint Mfg. Co 1

Furnace Supplies.

Chicago Furnace Supply Co 9
Colebrook. W. H. Sons & Co 9

Furnaces—Tinners.

Clayton & Lambert Mfg. Co 54

Furnaces—Warm Air.

American Furnace Co., The 16
Bergstrom Bros. & Co 16
Boynton Furnace Co 19
Brand Stove Co 13
Forest City Foundry & Mfg. Co 14
Front Rank Steel Furnace Co 18
Germer Stove Co 15
Henry & Scheible Co 20
Hess-Snyder Co., The 11
Lennox Mfg. Co 17
Magee Furnace Co 15
March-Brownback Stove Co 17
Meyer Bros. & Co., F 17
Monroe Foundry & Furnace Co 18
Mueller, L. J. Furnace Co 13
Pittsburgh Stove & Range Co 6
Richardson & Boynton 16
Robinson Furnace Co 17
Schwab, R. J. & Sons Co 22
Smith, Chas. Co 9
Stanton Heater Co 13
Tubular Heating & Ventilating Co 20

Galvanized Ware.

Briscoe Mfg. Co 60

Gas and Gasoline Engines.

Weber Gas and Gasoline Engine Co 52

Gun Cleaners.

Bridgeport Gun & Implement Co 2

Hardware Specialties.

Acorn Brass Mfg. Co 59
Atkins, E. C. & Co 68
Atlas Mfg. Co 68
Atlas Bolt & Screw Co 1
Avery Stamping Co., The 61
Berger Bros. Co 57
Blacklock Foundry Co 65
Bischoff, Fred. F. & Co 65
Bridgeport Chain Co 61
Briscoe Mfg. Co 60
Clark Novelty Co 64
Cooley & Randegger Mfg. Co 65
Davison Mfg. Co 63
Disston, Henry & Son 66
Enterprise Mfg. Co. of Pa 67
Farwell, Ozmun, Kirk & Co 64
Ham, C. T. Mfg. Co 60
Harps, J. A. Mfg. Co 64
Hoehn, Fred 58
Hopkins & Allen Arms Co 50
Hurwood Mfg. Co 66
Kohler, F. E. & Co 60
Lee-Glass-Andreesen Hdw. Co 67
Lufkin Rule Co 66
Mayer & Co 2
Meyers, The Fred J., Mfg. Co 58

Hardware Specialties—Con.

Morrill, Chas 58
Nat. Enameling & Stamping Co... 58
Norris & Loring Hdw. Co..... 50
North Bros. Mfg. Co..... 61
Peck, C. A. Hdw. Co..... 66
Plume & Atwood Mfg. Co..... 61
Reissmann, F..... 66
Sitterly Novelty Works 61
Smith & Hemenway Co 61
Sperry, D. R. Co..... 2
Stanley Rule & Level Co..... 66
Stuber & Kuck..... 60
Taylor & Boggis Foundry Co 65
Tower Mfg. Co..... 60
Union Brick Bond Co..... 52
Weiss, H. & Co 50

Heaters—Hot Water and Steam.

American Radiator Co..... 2
Boynton Furnace Co 19
Detroit Heating and Lighting Co.. 18
Hart & Crouse Co 18
Kewanee Boiler Co..... 2
Monroe Foundry & Furnace Co... 18
Quaker Mfg. Co..... 19
Smith, Chas. Co..... 9
Stanton Heater Co..... 13
Stolz, Frank D 8

House Furnishing Goods

Briscoe Mfg. Co..... 60
Enterprise Mfg. Co. of Pa..... 67
Meyers, The Fred J., Mfg. Co..... 58
Nat. Enameling & Stamping Co.. 67
Sperry, D. R. & Co..... 2
Stuber & Kuck..... 60

Iron Handles—Sad.

Hoehn, Fred..... 58

Knives.

Smith & Hemenway Co..... 61

Lamps—Miners.

Anton, George..... 62

Lanterns.

Ham, C. T. Mfg. Co..... 60

Lawn Sprinklers.

Smith & Hemenway Co..... 61

Lighting Devices.

Acorn Brass Mfg. Co 59
Brilliant Gas Lamp Co..... 59
Niagara Falls Acetylene Gas Generator Co..... 59

Mail Boxes.

Canton Steel Roofing Co 56
Peck, C. H. Hdw. Co..... 66

Metal Polish.

Hoffman, Geo. W..... 53
Stevens, F. B..... 53

Metals—Perforated.

Aitchison, The Robert Perf'd Metal Co..... 57
Stimpson, Edwin B. & Son. 57

Miniature Tools.

Davison Mfg. Co..... 68

Oil Cans.

Harps Mfg. Co., J. A..... 64

Oven Thermometers.

Helios-Upton Co. 53

Paints.

Buckeye Paint & Varnish Co..... 54
Connors, Wm. Paint Mfg. Co..... 1
Dixon, Jos. Crucible Co..... 50
Forest City Paint & Varnish Co.. 54

Patents.

Peck, Hubert S..... 49
Willson & Co., H. B..... 61

Pattern Letters.

St. Louis Electrotyping & Fdy. Co. 54

Pencils.

Dixon, Jos. Crucible Co..... 50

Punch—Hand.

Morrill, Chas 58
Weiss, H. & Co 55

Radiators—Hot Water and Steam.

American Radiator Co..... 2
Smith & Hemenway Co 61

Radiators—Stove Pipe.

Burton, The W. J. Co 8
Cole Mfg. Co 8
Rochester Radiator Co..... 8
Wilmot Castle Co 8

Registers.

Auer Register Co..... 22
Ferrosteel Co..... 22
Hart & Cooley Co., The..... 23
Henry & Scheible Co 20
Independent Register Co..... 22
Mueller, L. J. Furnace Co..... 23
Norris & Loring Hdw Co..... 50
Schwab, R. J. & Sons Co..... 22
Symonds Mfg. Co 23
Walworth Run Foundry Co..... 23

Roofing.

American Steel Roofing Co..... 55
Berger Mfg. Co. 57
Canton Steel Roofing Co..... 56
Clark, Quien & Morse..... 55
Cortright Metal Roofing Co..... 2
Eller, J. H. & Co..... 56
Garry Iron & Steel Co..... 54
LaCrosse Steel Roofing & Corrugating Co 55
Milwaukee Corrugating Co..... 55
Osborn, The J. M. & L. A. Co..... 56
Perkins, J. L. & Co..... 1

Sandpaper Handles.

Reissmann, F..... 65

Sash Balance.

Pullman Mfg. Co..... 68

Saws.

Atkins, E. C. & Co..... 68
Disston, Henry & Sons..... 66

Saw Sets.

Disston, Henry & Sons..... 66
Smith & Hemenway Co 61
Morrill, Chas..... 58

Scales.

American Cutlery Co..... 59
Osgood Scale Co..... 1
Pelouze Scale Co 59
Triner Scale & Mfg. Co 59

Screw Drivers.

Hurwood Mfg. Co..... 66
North Bros. Mfg. Co..... 61

Shovels.

Avery Stamping Co., The 61
Kohler, F. E. & Co..... 60

Skylights.

Galesburg Cornice Works..... 57
Jones, J. H. & Son..... 2

Skylight Gearing.

Weiss, H. & Co..... 50

Slaters' Tools.

Iscle, A. W. & Son 50

Sporting Goods.

Bridgeport Gun & Implement Co. 2
Hopkins & Allen Arms Co 50
Peters Cartridge Co..... 2
Stevens, J. Arms & Tool Co 62

Steel—Sheet.

Sayre Stamping Co..... 52

Stove Bolts.

Atlas Bolt & Screw Co..... 1
Columbus Bolt Works 1

Stove Lining.

Connors, Wm. Paint Mfg. Co..... 1
Bridgeport Crucible Co..... 53
Williams Stove Lining Co..... 53

Stove Patterns.

Cope, Geo. W. Pattern Works.... 52
Gobeille Pattern Works..... 52
Mersfelder Pattern Works 52
Milwaukee Pattern Works..... 52
Weller Pattern Co..... 52

Stove Polish.

Black Silk Stove Polish Works .. 53
Dixon, Jos. Crucible Co..... 50
Nickel Plate Stove Polish Co..... 12

Stove Putty.

Connors, Wm. Paint Mfg. Co..... 1

Stove Repairs.

Brauer, A. G..... 52
Brucker, M 52
Dust, Wm. T. Co..... 52

Stoves and Ranges.

Beckwith, Estate of P. D..... 24
Brand Stove Co..... 13
Champion Steel Range Co..... 12
Clark, Geo. M. & Co 10
Cole Mfg. Co 8
Cosby, Chas. H..... 13
Eclipse Stove Co., The 9
Faultless Mfg. Co 7-19-63
Hess-Snyder Co., The 11
Joliet Stove Works 4
Kontny, John..... 5
March-Brownback Stove Co..... 17
Peerless Steel Range Co 11
Pittsburgh Stove & Range Co..... 6
Royal Stove and Range Co..... 6
Smith & Anthony Co..... 12
Sterling Foundry Co..... 10
Travilla, M 12
White Stove Co., Thos..... 8
Willard, Wm. G..... 12

Stove Supplies.

Chicago Furnace Supply Co 9
Sayer Stamping Co..... 52

Stove Trimmings.

Atlas Bolt & Screw Co..... 1
Columbus Bolt Wks..... 1
Helios-Upton Co..... 53
Howes, S. M. Co., The..... 52
Sayre Stamping Co..... 52
Taylor & Boggis Fdy. Co..... 65

Tacks.

Tower Mfg. Co..... 60

Tape Measures.

Lufkin Rule Co..... 66

Tents and Awnings.

American Tent & Awning Co 60

Tinners' Tools and Supplies.

Berger Bros. Co..... 57
Clayton & Lambert Mfg. Co..... 54
Dries: Andrews & Krump 55
Lufkin Rule Co..... 66
Perkins, J. L. & Co..... 1
Sayre Stamping Co..... 52
Smith & Hemenway Co 61
Stanley Rule & Level Co..... 66
Swaine, Fred. J. Co..... 54
Weiss H. & Co..... 50
Young Mfg. Co., The 57

Tinplate.

American Tinplate Co..... 54
Garry Iron & Steel Co..... 54
Harps Mfg. Co., J. A..... 64
Illinois Roofing & Supply Co..... 68
McClure & Co..... 68
Osborn, The J. M. & L. A. Co..... 56

Tinware.

Cooney & Geiger..... 68
Nat. Enameling & Stamping Co... 58
Stuber & Kuck..... 60

Torches.

Clayton & Lambert Mfg. Co..... 54

Tools.

Geneva Tool Co..... 1
Hurwood Mfg. Co..... 66

Ventilators.

Globe Ventilator Co..... 68
Powers Bros..... 1

Washers.

Columbus Bolt Works 1

Washing Machines.

Benbow-Brammer Mfg. Co..... 63
Boss Washing Machine Co..... 63
Brammer, H. F. Mfg. Co..... 63
Gagan, J. M., & Co 59
Nineteen Hundred Washer Co.... 62
Nineteen Hundred and Three Washer Co..... 63
Voss Bros. Mfg. Co..... 62
White Lily Washer Co..... 62

Water Supplies.

Horigan Supply Co..... 60

Weaner—Colt, Calf, Cow.

Cooley, Randegger Mfg. Co..... 65

Wrenches.

Davison Mfg. Co..... 63
Hurwood Mfg. Co..... 66

EASY WHEN YOU KNOW HOW.

It is the easiest thing in the world to write a simple advertisement—all you have to do is to find out what there is to say about the subject of your advertisement, and then write it down in the order in which the various points will best appeal to the reader. But if you undertake to twist the facts into a knot that you may arouse the reader's curiosity to get him to attempt to unravel it, you will encounter hard work and a great deal of useless expense. After all, most of the mystery of mysteries of advertising consists in doing things which are considered smart by the people who invent them and foolish by the people who read them. A great deal of money is spent on this mysterious kind of advertising, but it is safe to say that half the money invested in simple statements which people can understand would bring immensely greater returns. The writer of an advertisement should digest the information he may receive about the subject of his sketch and consider what points are known to the public, what points are commonplace and what points stand between the public and the purchase. He will find very often that the points which appeal to him will be commonplace to the public; and the points which seem commonplace to him will most strongly appeal to the public.—Waldo P. Warren, Advertising Manager of Marshall Field & Co., Chicago.

Trade Report.

CHICAGO IRON MARKET.

The pig iron market has resumed activity and between inquiries and actual sales the producers and sellers of pig iron are kept fairly busy.

The almost universally recognized price by makers and sellers of southern pig iron is $12 Birmingham now for No. 2 Southern and at that figure buyers seem to be satisfied and are taking hold freely.

Local irons, made from Lake Superior ores, are still held at $17.50 for No. 2 Foundry delivered in Chicago, or a trifle lower basis at the furnace for out-of-town delivery.

This is more than the usual difference between northern and southern irons, but is accountable mainly by the fact that tributary to Chicago the furnaces that are not on Bessemer for steel purposes are under a heavy demand for malleable as well as strong foundry irons of the low phosphorus, low sulphur character, and they command and get, and doubtless will continue to get for some time to come, higher prices than southern irons can command at this time.

There is a large business yet to be placed for forward delivery, and it is thought that the next week or ten days will see a large business booked for deliveries extending to the end of the first quarter of 1904, and in some cases to the end of the second quarter.

The demand for spot delivery iron during last week for some reason has increased materially.

BARS.

There has been a good portion of inquiries on steel bars most of which is expected to be placed this next week. There is a fair demand for bar iron, but few manufacturers are getting a sufficient tonnage to keep all their mills busy, one producer reporting that its sales this month are 20 per cent less than its output. There is keen competition for the business offered and quotations are now down to the basis of 1.55c, Chicago. We quote mill shipments, Chicago delivery: Bessemer steel, 1.76½c; angles, less than 3x3, 1.86½c base; hoops in lots of 250 tons and greater, 2.06½c; less than this amount, 2.16½c; iron, 1.55c to 1.60c. Quotations from store, less than carload lots, steel, 2c; iron, 2c to 2.10c; hoops, 2.30c to 2.40c; angles, 2.10c rates.

BILLETS.

Sales on billets during this week have been few and interest shown of little consequence. There is no change in the regular quotations of $28 for Bessemer, $29 for open-hearth, and $32 for forging, carload lots.

STRUCTURAL MATERIAL.

There are several movements on hand for the erection of new structures, but the immediate demand is light. Store trade is fairly brisk, but quotations have been reduced. We quote mill shipments, Chicago delivery, as follows: Beams and channels, 16 inches and under, 1.75c; 18 inches and over, 1.85c; universal plates, 1.75c; angles, 3x3 and larger, 1.75c; tees, 3x3 and larger, 1.80c; zees, 1.75c. Lots from store, 2.10c to 2.25c per 100 pounds, rates.

MERCHANT STEEL.

Business during this week has had some improvement. Both agricultural implement and carriage manufacturers have been in the market, the latter for spring and tire steel. Agricultural makers have placed orders for a number of specialties, as well as standard steel. Prices have remained unchanged, the official quotations being as follows for mill shipment: Smooth finished machinery steel, 2.01½c to 2.11½c; smooth finished tire, 1.96½c to 2.11½c; open hearth spring steel, 2.66½c to 2.76½c; toe calk, 2.31½c to 2.46½c; sleigh shoe, 1.86½c to 1.96½c; cutter shoe, 2.41½c to 2.61½c. Ordinary grades of crucible tool steel are quoted at 6c to 8c for shipment; specials, 12c upward. Cold rolled shafting in carload lots sells at 47 and in less than carload lots at 42 discount from list.

RAILS AND TRACK SUPPLIES.

Demand for early shipment on both light and standard rails has been fair during the week. There has been but little inquiry for 1904 delivery, but the market has continued firm, official prices being $28 for standard and $27 for second quality, mill shipment. Light rails have sold at $34 to $38. Track supplies have been in good demand and the market has remained firm, as follows: Splice or angle bars, 2c to 2.10c; spikes, 2.10c to 2.15c; track bolts, 3½ to 3¾ inches and larger, with square nuts, 2.85c to 2.90c; with Hexagon nuts, 3c to 3.10c. From store 10c to 15c over mill prices are asked and obtained.

WIRE NAILS.

Several good contracts have been placed for fall delivery on assorted sizes and an urgency for early shipment. While stocks have accumulated cars seem to be none too plentiful to make prompt shipments. The tone of the market is firm and the prospect seems that prices will be well maintained throughout the year. Sales continue to be made at $2.15 to $2.20 for carload lots, f. o. b. Chicago. Broken cars sell at 5 to 10 cents higher. For galvanized 75 cents per keg and for tinning $1.50 extra per keg is charged.

CUT NAILS.

The demand on cut nails remains steady and there has been less disposition to shade prices by the jobbers and the mills preserve a firm tone, sales being made on the basis of $2.30 in carload lots and $2.35 for less than carload lots for steel, Chicago. Iron nails are held at $2.45 to $2.50 per keg from store.

SMOOTH FENCE WIRE.

The demand on smooth fence wire has been active this week, and the mills find some difficulty in making shipments promptly, the market continuing firm in tone for all kinds, prices being as follows: Nos. 6 to 9, $2.05 to $2.10 in carload lots on track, and $2.15 to $2.20 in less than carload lots from store; galvanized, 30 cents extra for Nos. 6 to 14; and 60 cents extra for Nos. 15 and 16.

BOLTS AND NUTS.

Bolts and nuts are somewhat slow and the most unsatisfactory article as far as prices are concerned of anything in the hardware market. In view of the unevenness in manufacturers' quotations an opportunity is given to buyers for careful purchasing. The irregularity of discounts is such as to leave the market practically, if not actually, an open one. This branch of the trade is feeling the effect of a moderate volume of business, especially when compared with the very heavy business of the past few years. With the increase in production and the diminished demand, for the present at least, there is a natural reaction. The trade, in view of the unsettled condition of things, have very generally been holding off and deferring their purchases. It is possible, however, that the low prices now obtainable may tempt them to place orders.

SCYTHES.

Scythes manufacturers and prices have come together and agreed on prices for next season, which are substantially the same as those for the season just past. They regard the condition, so far as prices are concerned, as satisfactory, especially as until quite recently there was a possibility that they would fail to act in concert so far as quotations are concerned.

CORDAGE.

The market on sisal rope is mostly for mixed goods, orders for which are received in good volume. There is a fair call for Manila rope. Quotations, on the basis of 7-16 inch diameter and larger, are as follows: Mixed sisal, 8¼ to 8½ cents per pound; pure sisal, 9¼ to 9½ cents per pound; Manila, 11½ to 11¾ cents per pound.

LINSEED OIL.

The seed market is stronger, causing a firmer feeling among crushers and some out-of-town crushers have withdrawn former quotations and are now asking 36 cents for raw. Other out-of-town crushers are quoting 35 cents per gallon. Demand for city and out-of-town oil is light and is confined to immediate requirements. Quotations are as follows: City raw, in lots of five barrels or more, 37 cents; in lots of less than five barrels, 38 cents per gallon. Out-of-town brands of raw are quoted, according to quantity, at 35 to 36 cents per gallon.

SPIRITS TURPENTINE.

The feeling existing in Saramade continues and the market remains the same. Sellers and buyers appear equally indifferent, and business is confined to pressing requirements. Quotations, according to quantity, are as follows: Oil barrels, 57½ to 58 cents; machine-made barrels, 58 to 58½ cents per gallon.

TIN.

The market for tin is quiet and easy at 28c for spot and 27¾c for futures. The jobbing price is steady at 28¾@29½c.

TIN PLATES.

Tin plates are steady, jobbing quotations remaining unchanged at: Melyn, $6.50@7; Alloway, $5.75@6.25; coke, $4.87½@6.50; ternes, $5.25@8; additional X, $1.50@1.75 more.

LEAD.

Lead is firmer, with the Smelters' Association asking 4.17½c in large lots and 4.22½c in 25-ton lots. Brokers are asking 4¼c for small spot lots. Here the jobbing quotation is 4¾@5c, according to quality. St. Louis is firm at 4.12½@4.15c; manufactured pipe is steady at 6½c; sheet, 7½c; tin pipe, 50c; tin-lined pipe, 12½c; old lead, in exchange, 3½c; tea lead, 3c.

SPELTER.

Spelter is steady at: Round lots, New York, 6c for spot and 5¾@5⅞c futures; jobbing, 6⅛@6½c; sheet zinc, cask lots, 7½@8½c; small lots, 8@9c; St. Louis market is quoted quiet, at 5.60@5.75c.

ANTIMONY.

Antimony is dull and neglected: Cookson's, 7@7¼c; Hallett's, 6⅜c; United States and other brands, 6⅛c. The above prices are for round lots in New York.

NICKEL.

Nickel is steady at 40@47c for large lots. Small lots are quoted at 60c. Prices of nickel anodes are as follows: 80 to 82 per cent nickel, 45@50c per lb; 82 to 84 per cent, 52@57c; 95 to 97 per cent, 54@59c. The lower price, in each case, is for lots of 500 lbs or over; the highest for lots of 100 lbs or less.

PLATINUM.

Platinum is firm, with a good demand: New York, $19 per oz. for large lots.

QUICKSILVER.

Quicksilver is firm and unchanged: New York, $47.50 per flask for large lots; small orders, more; San Francisco, steady at $44.50@46 domestic orders; export, $42@43.

ALUMINUM.

Aluminum is quiet and unchanged: No. 1 ingot, 33@37c per lb; No. 2, 31@34c; rolled sheets, 4c and up.

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x14	$10 25
IC	14x20	7 85
IX	14x20	9 10
IXX	14x20	10 35
IXXX	14x20	11 60
IXXXX	14x20	12 85
IC	20x28	15 45
IX	20x28	17 95
IXX	20x28	20 45

COKE PLATES.

Cokes, 180 lbs	IC	20x28	9 15
Cokes, 200 lbs	IC	20x28	9 35
Cokes, 216 lbs	IC	20x28	9 65
Cokes, 216 lbs	IX	20x28	11 75

PIG IRON.

Lake Sup. Charcoal	$19 00@$20 00
Local Coke Fdy No. 1	17 00@ 17 50
Local Coke Fdy No. 2	16 50@ 17 00
Local Coke Fdy No. 3	16 00@ 16 50
Local Scotch Fdy No. 1	18 00@ 18 50
Southern Coke No. 1	16 35@ 16 85
Southern Coke No. 2	15 85@ 16 35
Southern Coke No. 3	15 35@ 15 85
Southern Coke No. 4	15 35
Southern No. 1 Soft	16 35@ 16 85
Southern No. 2 Soft	15 85@ 16 35
Southern Gray Forge	14 35@ 14 85
Southern Silveries (4% to 5% silicon)	18 35@ 18 85
Southern Silveries (5% to 6% silicon)	18 85@ 19 35
Jackson Co. Silveries (6% to 8% silicon)	20 30@ 21 30
Jackson Co Silveries (8% to 10% silicon)	21 30@ 22 30
Ohio Strong Softeners	21 00@ 22 00
Alabama and Georgia Car Wheel	25 35@ 27 35
Malleable Bessemer	17 00@ 17 50

BLACK SHEET STEEL.

No. 16	per 100 lbs.	$2 65
No. 18-20	per 100 lbs.	2 75
No. 22-24	per 100 lbs.	2 85
No. 25-26	per 100 lbs.	2 95
No. 27	per 100 lbs.	3 05
No. 28	per 100 lbs.	3 15
No. 29	per 100 lbs.	3 30

SMOOTH STEEL.

Wood's Smooth	No. 15-17	2 85
" "	No. 18	2 95
" "	No. 20	3 05
" "	No. 22-24	3 15
" "	No. 25-26	3 25
" "	No. 27	3 35
" "	No. 28	3 45

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel. "A" $10 20, "B" $9 20

GALVANIZED IRON

F.O.B. Chicago 75&2½%

HOOP IRON.

¾x22	¾x20	¾x20
$3 20 100lbs.	$3 10 100lbs.	$3 00 100lbs.
1x20	1¼x19	1½x19
$2 90 100lbs.	$2 85 100lbs.	$2 75 100lbs.

PAINTED CORRUGATED IRON.

8 x 3½ feet Sheets, 28 gage, per 100 lbs. $2 45

SOLDER.

XXX Guaranteed ½&½	per lb. 20¾c
Commercial ½&½	per lb. 20¼c
No. 1 Plumbers	17¾c

SHEET ZINC.

600 lb. Casks	base, per cwt. $6.90
300 lb. Casks	per cwt. 7.10
Sheets	per cwt. 7.15

COPPER.

Copper base, 24c

TIN PIGS AND BARS.

Banca, pigs, per lb	35@35½c
Straits pigs, per lb	35c
Straits in bars, per lb	37c

LEAD.

American Pig	$4 60@4 62½c
Bar	6¼
National (White) brands (in less than 100 lb. lots) per lb	7¾

HARDWARE.

ADZES.

Carpenters'.
- Ajax 50%
- Blood's 40&5%
- Hunt's 25%
- White's 12½%

Coopers'.
- Barton's 20%
- White's 15%

Ship.
- Ajax 50%
- Blood's 40&5%
- Hunt's 25%
- White's 12½%

AMMUNITION.

Caps, Percussion—per 1,000.
- F L Waterproof, 1-10s 40c
- G D 35c
- Eley's 52c

Cartridges.
- Peters Rim Fire Ctgs 50&3%
- Peters Cent Fire, Pistol & Rifle 25&3%
- Peters Cent Fire, Military and Sporting Ctgs 15&3%
- Peters Blank Ctgs, except 22 and 32, an additional 10% from above discount.
- Peters Blank Ctgs. 22 cal. $1 18
- Peters Blank Ctgs. 32 cal., C. F. 4 40
- Peters B B Caps, Round ball $1 44
- Peters B B Caps, Conical ball $1 85
- U. M. C. Rim Fire Ctgs 50&3%
- U. M. C. Cent. Fire, Pistol & Rifle 25&3%
- Winchester Cent. Fire, Military and Sporting Ctgs 15&3%
- U. M. C. B B Caps, Round Ball $1 75..18%
- U. M. C. B B Caps, Con. Ball $1 85 net
- U. M. C. Rim Fire Shot Ctgs. 50&15&3%
- U. M. C. Cent. " " 25&15&3%

Primers.
- Berdan Primers $1 00
- Peters Primers 1 20
- U. M. C. Primers 1 20
- Winchester Primers 1 20

Shells.
- Peters Empty Paper Shells, 10 and 12 gauge. League 25&3%
- Peters Empty Paper Shells, 16 gauge. League 30&2%
- Peters New Victor Nitro Shls. 30&2%
- Ideal 25&7%
- Peters Loaded Shells. League and Referee Semi-Smokeless 40&1%
- Peters New Victor Loaded Shells with King's Smokeless 40&6%
- Ideals Loaded with King's Smokeless 40&10&10&1%
- U. M. C. New Club, 16 gauge 30&2%
- U. M. C. New Club 25&3%
- U. M. C. Nitro 30&2%
- U. M. C. High Base 30&2%
- Winchester Blue Rivals } 40&1%
- Winchester Yellow Rivals } 40&1%
- Winchester Repeater 30&2%
- Winchester Leader 40&6%
- U. M. C. Loaded Shells, Black Powder } 40&1% full cases
- Winchester Loaded Shells, Black Powder } 40&1% full cases
- U. M. C. } Smokeless 40&10&10&1% full cases
- Winchester } Smokeless 40&10&10&1% full cases

Gun Wads—per 1,000.
- Peters Gun Wads 18%
- U. M. C. Gun Wads 18%

Powder. Each
- King's Smokeless, kegs $11 30
- " " ¼ kegs 5 80
- " " ½ kegs 2 97
- " " 1-lb. cans 51
- " " 1-lb. " rifle 70
- Dupont's " 50-lb. drum 22 45
- " " 25-lb. kegs 11 30
- " " 12½-lb. kegs 5 80
- " " 6¼-lb. kegs 2 97
- " " 1-lb. cans 51

Shot.
- Dropshot, sizes smaller than B, 25-lb. bags, per bag $1 40
- Drop shot, B and larger sizes, 25-lb. bags, per bag 1 65
- Buck Shot, 25-lb. bags, per bag 1 65
- Chilled Shot, 25-lb. bags, per bag 1 65

ANVILS.

Trenton, 70 to 80 lbs	9¾c per lb
Trenton, 81 to 150 lbs	9c per lb

AUGERS.

Boring Machine 60&10&5%

Carpenters' Nut 60&10&5%

Hollow: Ives' New Pattern 25%
- Bonney's—list $30.00 65&10%
- Stearn's, No. 1 dos. $42 00
- Stearn's, No. 3 " 33 50

Post Hole.
- Dalbey, 8-inch per doz. $ 5 75
- Digwell, 8-inch " 13 00
- Howe's, 6 and 8-inch " 12 50
- Iwan's Improved 40 & 5%
- Vaughan's, 6 to 9-inch per doz. 6 75

Rafting.
- Snell's 50&5%

Ship.
- Ford's, with or without screw, 40-5%
- Snell's, " " " 40-5%

AWLS.

Brad, handled	per doz.	$0 26
shouldered, ass'd, 1 to 4	per gr.	1 10
patent, asst'd, 1 to 4	"	95
Harness, common	"	1 20
patent	"	95
Peg, shouldered	"	1 10
patent	"	40
Scratch, No. 2, handled	"	4 50
No. 1, socket handled	per doz.	1 15
No. 20 Hurwood	"	2 00
Sewing, common	per gr.	1 10
patent	"	95

AXES.

Boys', Handled:
- Camp Fire, 3-lb., per doz $5 75
- " " 4-lb., freighters', per doz 6 75
- Cast Steel, good grade, pr. dz. 5 50
- Pioneer, per doz 6 75

Broad:
- Peerless 50%
- Red Warrior, per doz $18 50

Firemen's, per doz 15 50

Single Bitted (without handles)
- Gladstone, per doz $6 75
- Hubbard's " " 6 50
- Hunt's " " 6 25
- Lippincott's " " 6 25
- Mann's " " 6 50
- Pioneer " " 6 50
- U. S. A. " " 7 75
- Valley Forge " " 6 00
- Second Quality " " 5 75

Double Bitted (without handles):
- Lippincott's per doz $8 50
- Mann's " " 8 50
- Pioneer " " 9 25
- U. S. A. " " 11 00
- Valley Forge " " 8 25

Ship, Blood's " " 18 50

BALANCES, SPRING.

Frary's	50%
Pelouze	20%

BAGS, PAPER NAIL.

Pounds	3	5	10	16	20	25
Per 1,000	$1 60	1 85	2 60	3 40	3 90	4 75

BARS, CROW.

Pinch or Wedge Point cwt. $3 40

BEAMS—SCALE.

P. S. & W. Co 40%

BEATERS.

Carpet, Rattan per doz $2 40
- Raymond's Steel Wire, " " 80
- Woven Wire, No. 4 " " 1 10

Egg.
- Dover Pattern per doz. $0 70
- Genuine Dover " 0 90
- Mammoth Dover " 1 75
- Lightning " 0 84
- Lyon's (standard size) " 1 75
- Whip, French " 1 35
- Spiral " 0 40
- Spoon " 0 40
- Surprise per gro. 1 45

BELLOWS.

Blacksmiths'	70&5%
Hand, 8 in. per doz.	$ 6 85
10 in. "	8 40
Molders', 12 in. per doz.	13 00

BELLS.

Call.
- 2¾ in. nickeled bell, per doz. $ 1 35
- 2¾ in. " brass bell " 3 60
- 3 in. " " " " 7 50
- 3 in. " silver alloy bell, per doz. 16 50
- 4½ in. " brass bell and base per doz. 14 50

Cow.
- Ordinary Goods 70&5%
- High Grade 60&10%
- Jersey 70&10%

Door.
- Bigelow Automatic, per doz. $9 50
- Rotary.
- 3 in. bronzed iron bell " 5 25
- 3 in. nickeled " " 7 50
- 3½ in. " " " " 9 00

Hand.
- Hand Bells, Polished 60@50&10%
- White Metal 50%
- Nickel Plated 40%
- Swiss 60&5%
- Silver Chime 33⅓%

Miscellaneous.
- Church and School, Steel Alloy, 50, 10 & 5%
- Farm, lbs. 40 50 75 100
- Each $1 10 $1 30 $1 85 $2 65

Miscellaneous Cont.
- Strapped Sheep per doz. $1 90
- House Gong 40&5%
- Sleigh, Round, Loose 40&5%

BELTING

Leather—List dated Nov. 12, 1901.
- Standard 75%
- Eclipse 60&10%
- Extra Grade 50&10%

Rubber—
- Standard 75&5%
- Amherst 55&10%
- Extra 50&2½%

BEVELS—TEE.

Stanley's, rosewood handle, new list 40&5%

Stanley' ron handle 40&5%

BINDING—OIL CLOTH.

Zinc	75, & 10%
Brass	75%
Brass Plated	75 & 10%

Auger. BITS.
- Extra Double Spur 70&5%
- Ford's Car and Machine 40&10%
- Ford Improved 40&10%
- Ford's Ship 40&10%
- Irwin 30&10%
- New Jenning's 50%
- Russell Jenning's 35&7½%
- Clark's Expansive 50, 10&5%
- Steer's " Small, new list $22.0
- Irwin Car 30&10%
- Snell's Car 60&5%
- " Ship 40&5%
- " " Auger Pattern Car 40&5%

Center 40&10%

Countersink—
- Wheeler's per doz. $1 60
- American Snail Head " 0 70
- " Rose " " 0 80
- " Flat " 0 70
- Buck Bros'. Flat " 2 60
- German " 0 70

Dowel, New Jennings 40&10%

Gimlet—
- Standard Double Cut 50&5@50&10%
- German Pattern per doz. $0 48
- Gouge " 0 80
- Spoon " 0 80
- Countersink " 1 30

Reamer—
- Buck Bros.' ½ Round. " 2 75
- " " Square " 3 50
- Standard ½ Round " 0 75
- " Square " 0 75
- German Octagon " 0 75

Screw Driver—
- Round Shank " 0 48
- " " extra quality " 1 40
- Square Shank " 1 10

BLACKING—STOVE. (See Polish.)

BLADES—SAW.

Butchers'—
- Standard ¾ & 1¼in 60&5%
- Clock Spring 60&5%
- Star 30%

Hack—
- Disston's 25&5%
- Griffin's 35&5%
- Star 30%

Wood—
- Jackson's per doz. $3 25
- Disston's—No. 6, 16, 26 & 045, $4 20; No. 11, $6.30.
- W. M. & Co.'s No. 20 per doz. $5 50

Snatch— BLOCKS.
- Wooden 50&10%
- Steel 40&10%

Tackle—
- Wooden 70&5%
- Steel 50, 10&5%

BOARDS.

Stove 40%

Wash—
- Anchor per doz. $1 60
- Globe " 2 10
- Banner " 2 60
- Crystal " 3 15
- Brass King " 3 15
- Nickel Plate " 3 15
- Enamel King " 3 15

BOBS—PLUMB.

Carpenters', 5½ oz. iron pr dz. $0 65
- 1¼ lb. " " " 1 60
- 2¾ lb. " " " 1 80
- 13 oz. lead " 3 00
- 6½ oz. brass " 3 30

Masón's, 3 lb. lead " 4 00

BOILERS—FARM.
- Profit 30&5%
- Solon 35&5%

BOLTS.

Carriage, Machine, Etc.
- Carriage, ⅜x6¼ and sizes smaller and shorter 70%
- Carriage, ⅜x6¼ and sizes larger and longer 60&10%
- Machine 70%
- Elevator 50-10&5%
- Plow 45&5%
- Stove 80-5%
- Tire 72½&5%
- Wagon Box Strap 70&10%

Mortise Door—
- Gem 50-10&5%
- Ives' 50&10%

Barrel—
- Cast 50%
- Wrought 50&5%
- " Bronzed 75&5%

Flush, Wrought, B. K. 40&5%

Spring—
- Wrought 75&10%
- " Brass 75&30%

Square—
- Cast 40%
- Wrought 60-10&10%

BORERS.

Angular, Miller's Falls, per doz $12 75

Bung, Common Ring with Handle—

Inches	1¼	1¾	2
Per doz	$6 00	6 90	9 10

BORERS—CONTINUED.

Enterprise Mfg. Co., No. 1 List $1.50; No. 2, $2.00 each....35-10&5%

BOXES.

Nail, No..... 5 10 20
Per doz..... $3 65 10 50 13 00

Mitre—
New Langdon.....15&5%
Olmsted's 15%
Stanley's.....30%
Seavey's.....per doz 8 00

Twine, Nos.... 20 30 25 121
Per doz $1 50

BRACES.

Common Ball.....$1 35@1 45
Barbers' Pattern .....60&10%
Fray's Gen. Spofford's.....50&10%
" No. 66 to 146.....50&10&7½%
P. S. & W. Co.'s Peck's Adjustable.....50-10&5%

BRACKETS.

Hay-Rack, Wenzelmann's No. 1, $12.60; No. 2, $13.20 per doz.

Shelf—
Cast Iron, Plain .....50&10%
Stanley's Wrought Steel.....
.....70-10&3½%
Wire.....75-10&5%

BROILERS.

Wire .....70&10%
Crown, Self-Basting, No.80..doz. $9 00

BUCKETS.

Pump Rubber—
Wychoff.....per gr. $4 75
Cooper..... " 5 50
Champion ..... " 7 50
Victor ..... " 9 50
Star..... " 5 00
IXL..... " 6 75

Well—
Galv'd Qts..... 8 10 12
Per doz $2 50 2 85 3 15
Wooden, top ear, plain, per doz 3 40
" " swivel " 4 65
" side-strap, plain " 3 50
" " swivel " 4 75

BUCKS, SAW.

Folding .....per doz $1 75

BURS, RIVETING.

Copper Burs Only.....35-10&5%
Tinners' Iron Burs Only.....70%

BUTTS.

Cast-Iron.....65&10%
Wrought Brass.....20%
Wrought Steel Bright—
Nos. 800, 804, 808, 810, 814 and 834
.....70-10-10&5%
Nos. 838, 840 and 842 ...70-10-10&5%
Nos. 822 and 828..... 75-25-10-10&5%
Wrought Steel, Japanned—
Nos. 731 and 737.....70&10&10%

CALIPERS.

Double .....40&10%
Inside and Outside.....40&10%
Wing.....40&5%

CALKS.

Logger's Boot,(Lufkin R. Co's.)
.....per M $3 65

Toe.
Shoenberger.....per lb. 5c
Bessemer ..... " 5½c
American ..... " 7½c
Swedes..... " 8½c

CANS.

Cheese Factory Can Stock—
Gallons.... 15 20 30 40
Per set....$2 90 $3 15 $3 75 $4 75

Milk
New Elgin Pattern,
Nos. 105, 408, 410, 708, 710.
Gal. each, 5 8 10 8 10
per doz. $16.60,$19.85,$21.10,$22.45,$24.45
New York Pattern,
Nos. 908, 910,
Gal. each, 8 10
Per doz. $25.15, $26.95.

Oil—
1 Gal. glass, Daisy....per doz. $2 25
1 " cushioned " 3 00
Star, gals..... 1 2 3
Per doz..... $1 85 $3 00 3 90
Per doz.
Champion Faucet, 5 gallon...$ 5 65
Sterling Tilting....5 " ... 8 25
"High C" Pump...5 " ... 9 25
Eureka Pump.....5 " ... 12 25
Wood Jacket.....50-10&5%

CAPS—GUN.

See Ammunition.

CARRIERS.

Hay—
Myers' Imperial.....each $2 40
" Clover Leaf..... " 3 40

CARTRIDGES.

See Ammunition.

CASTERS.

Acme—Ball Bearing.....35%
Bed.....60&10%
Common Plate—
Brass wheel.....60&10%
Iron and porcelain wheel...50&10%
Philadelphia Plate.....65&10%
Martin's.....40-10&5%
Payson's.....70%
Tucker's—Wood and iron wheel..70%
" Rubber wheel.....65&10%

CATCHERS—GRASS

Lieder's No. 1.....per doz. $6 25
Eureka..... " 4 25
Ideal No. 4..... 50

CHAIN AND CHAINS.

Breast Chains—
Doubleslack.....doz. pairs $5 00
With Covert snaps " 4 75
" slide..... " 2 90
Without slide..... " 2 60

Bright Ox Chains—
5-16in. $6 75: ⅜ in. $5 75 per 100 lbs.

Bright Coil Chain—
American, new list.....33⅓%
German.....60-10&5
Triumph, new list.....30%

Cable Coil Chain—
Inch..... 3-16 ¼ 5-16 ⅜
Per 100 lbs....$9 75 $7 25 $5 90 $4 75
Inch ..... 7-16 ½ ⅝ ¾
Per 100 lbs....$4 60 $4 50 $4 25 $4 35

Cable Log Chain—Advance 25c per 100 lbs. on Cable Coil.

Cow Tie Chains—
American 2 toggle.....40-10 & 5%
" toggle and snap, 40-10&5%
" open and closed ring.....40&5%

Halter Chains—
American, new list.....33⅓%
German.....60-10&5%
Niagara, new list.....40&5
Triumph, " 30%

Jack Chain—
Brass.....60%
Iron.....60%

Picture Chains—
Light Brass, 3 ft.....per doz. 63c
Heavy " 3 " ..... " 75c

Pump Chain—Galvanized per 100 lbs.....$4 45

Safety Chain—Brass.....60&10%

Stretcher Chains—
5-16 in., $7.75—⅜ in., $7.00 per 100 lbs.

Tie-Out Chains—Browns.....70&10%

Trace Chains—Western Standard—
6½— 6-2..... .....per pair 26c
6½— 8-2..... " 30c
6½— 8-3..... " 29c
6¾—10-2..... " 35c
7 —10-2..... " 40c
Add 2c per pair for Hooks.
" 2c " for Twist Link.

Wagon Stay Chains—
Inch ¼ 5-16 ⅜
Per 100 lbs. $6.50 $6.00 $5.25

Well Chains—
With Swivel.....per doz. 95c
Without " ..... " 80c

CHALK-CARPENTERS'.

Blue.....per gross 58c
Red..... " 48c
White..... " 38c
Common White Sch'l
Crayon..... " 5½c

CHARCOAL.

In barrels .....per bu. 21c

CHECKS-DOOR.

Blount 30%
Blum-Jap'd, $6.25; Brzd., doz... $7.00
Columbia.....50, 10&5%

CHIMNEY TOPS.

Iwan's Volcano.....50%

Box— CHISELS.
Inches..... 10 12 14
Round...per doz. $2.10 $2.25 $2.75
Flat.....per doz. 2.85 3.60 4.20

Cold—
Good quality.....per lb. 12@ 20c
U.S.A.,extra quality..per lb. 28c

Socket, Framing and Firmer—
Barton's.....20%
P. S. & W. Co's.....70%
For beveled back, add..per doz.....60c

Tanged, Firmer—
P. S. & W. Co's.....35&5%
With Handles add... per doz. 60c

Choppers, Enterprise Meat—
No. 12.....$2 75
No. 22..... 4 50

CHUCKS-DRILL.

Standard Tool Co.'s 40%
Goodell's, for Goodell's Screw Drivers.....per doz. $6.25
Yankee, for Yankee Screw Drivers..... 5.00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each $3.85 4.10 4.30
Belle, Barrel..... 70&5%
Common Dash, Gal.... 4 5 7
Per doz..... $6.75 7.50 8.00
Hero.....70%
Union, Gal..... 5 7 10
Each $3.65 3.90 5.00

CLAMPS

Adjustable—Martin's 40%
Carpenters'—Steel Bar..... 30%
Carriage Makers'—P. S. & W. Co.'s..... .....40, 10&5%
Hose—
Sherman's, brass, ¾ in., ...per doz. 23c
Double, brass, ¾ in...per doz. 65c
Saw Filers—
Disston's list, $30.00..... 30%
Stearn's, No. 0, $3.50, No. 1, $11.50, No. 3, $5.50 doz.
Wentworth's..... ..... 40%

CLAWS-TACK.

Cast, wood hdle...per doz., 45@ 60c
Forged steel, wood handle .....per doz. 80c
Solid Steel.....per doz. $1.60
Giant.....per doz .60

Drain— CLEANERS.
Iwan's Adjustable.....50%
Iwan's Stationary.....40%
Pot—Wire.....per doz. $0.45
Side-Walk—Steel.....per doz. 3.15
Window—
Peerless.....50, 10&5%
XLCR.....65&10%

CLEAVERS.

Family—Ajax, In..... 6 7 8
Per doz $5 50 5 75 6.25

CLEVISES.

Malleable..... .....per lb. 4½c

CLIPS.

Axle.....65&5%
Damper—
Standard .....per doz. $0.70
Troy ..... " .38
Hame..... " .30

Emery— CLOTH.
Ajax.....50&10%
B. & A.....50%

Hardware Wire—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft. $1.85
9 to 12 " " " " 2.15
2 to 8 " galv, " " 2.70
7 and 8 " " " " 3.25
An extra charge is made for 50 ft. lengths, and a still further advance for smaller pieces.

Screen Wire—
12 mesh, painted, per 100 sq.ft. $1.20
14 " " " " 1.85

COCKS—BRASS.

Compression Bibb.....60&10&5%
" Lock.....60&10%
Lever Bibb.....60&10%
Liquor .....per doz..$8 75
Racking.....60&10%

COFFEE MILLS.

Enter. Mfg. Co., list Jan 17, '93...25%
Parker's.....50%
Arcade.....60&10%

COLLARS—STOVE PIPE.

	Inches 5	6	7
Plain Tin....per gr.	$2.50	$2.80	$3.75
Japanned Tin, "	3.90	4.20	5.40
Lacquered Brass"	3.30	3.60	4.80

COMBS—CURRY.

Nos.	000	20	331	330	417	416
Per doz.	$0.32	.80	1.00	.95	.80	1.00
Nos.	531	533	530	535	545	390
Per doz	$0.96	1.20	1.10	1.65	1.40	1.30

COMPASSES.

Carpenter's..... 70%
Pencil—Faber's.....per doz.$1.00

COOLERS—WATER.

Galvanized Lined—Lever Faucet.

Gal.	2	3	4	6	8
Each	$1.35	1.65	2.00	2.35	2.95

Galvanized Lined—Telegraph Faucet

Gal.	2	3	4	6	8	10	15
Ea.	$1.65	2.00	2.25	2.65	3.30	3.65	4.90

Porcelain Lined—

Gal.	3	4	5	6	7	8	10
Ea.	$4.50	5.75	7.00	7.75	8.60	10.40	12.25

COPPER—SEE METALS.

COPPERS.

Soldering—1 to 2 lb....per lb. 25@29c
3 lb. and larger..... " 23c

CORD.

Picture—White Wire—List October 1900.....80&10%

Sash—
Baltic Braided Flax...per lb. 21½c
India Hemp, cable laid " 13 c
" " hawser " " 12 c
" " plain " " 13½c
Italian " cable " " 21½c
Russian " " " " 17 c
Samson, white " 31½c
" spot " 30½c
Silver Lake, white " 26½c
" " drab " 31½c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular.....50%
Williamson's Forged Worm.....50%

COTTERS—SPRING.

5-16 in. and smaller..... .....80&5%
⅜-in. and larger.....75%

COUPLINGS—HOSE.

Brass .....per doz. $1.00
Brass Plated..... " 85

COVERS, WAGON—SEE TENTS.

CRADLES—GRAIN.

Morgan's Grapevine ..per doz.$21 00

CRAYONS—SEE CHALK.

CROOKS—SHEPHERDS'.

American Pattern .....per doz. $6 75
Montana " ..... " 8 00
Scotland " ..... " 8 00

CROW BARS.

Pinch or Wedge Point, per 100 lbs..... $3 40

CUTTERS.

Meat—
Enterprise Nos. 5, 10, 12, 22, 32, and 42..... .....25%
No. 100, list, $18.00.....40&10%
Nos. 2 and 4.....35%
Ideal.....per doz. $9.75
Universal....No. 1 2 3
Per doz.....$10.75 $13.00 $18.00

Pipe-Stanwoods No. 1 2 3
Each.....$ .85 1.50 4.00

Slaw and Crout—
3-knife Crout.....per doz. $9.25
1 " Slaw..... " 1.35
2 " " ..... " 2.00
Washer..... " 7.75

DAMPERS—STOVE PIPE.

Standard.....70&10%
American.... ....40&10%

DIES—STOCKS AND

Discount..... 40%

DIGGERS.

Post Hole—
Iwan's Split Handle..per doz. $8.00
Iwan's Perfection....per doz. 8.00

DIVIDERS.

Wing 70%
Extension Wing.....35&5%

DIGGERS—POST HOLE.

Atlas .....per doz. $8.50
Eagle..... " 6.25
Eureka..... " 6.50
Hercules ..... " 10.25
Ryan's..... " 17.00
See also Augers—Post Hole.

DOORS—SCREEN.

⅝ in. 4 panel painted per doz. $ 6.75
½⅝ " " " " 7.25
in. 4 panel natural pine, fancy.....per doz.. 11.25

DOOR HANGERS—BARN.

Single Flange, D. B. Rail, ...per 100 ft. 1 60
Novelty Check Back, ... 3 in 4 in 5 in 6 in
Per doz. pairs, $2.60 $3.90 $4.95 $6.25

DRILLS.

Bit Stock.....60%&65&5%
Blacksmith's Twist.....60%
Breast—
Common.....each, $2.25
Millers' Falls..... " 2.10
Hand—
Goodell's Automatic—per doz.

No. 01	No. 03	No. 3	No 20
$7.75	$12.50	$14.25	$11.00

Goodell's Single Gear per doz. $16.00
Millers' Falls " " 12.50
" " Double " " 15.00
Reciprocating—
Goodells'.....per doz. $17 00
Bit Stock.
Standard List....60&5%@60%@10%

DRIVERS—SCREW.

Hurwood .....40&10%
Standard.....65&10%
Ajax.....70&5%
Champion.....50%
" Pattern.....75&5%
Clark's Interchangeable.. .... 33⅓%
Edison.....60%
Reed's Lightning.....50%
Goodell's Spiral.....50&10&5%
Yankee Ratchet.....50%
" " Spiral.....50&10&5%

ELBOWS.

Conductor.....,60%
Adjustable Stove—In. 5 6 7
Smooth....per doz. $0.95 0.95 1.40
Plan'd..... " 2.10 2.35 3.00
Corrugated Stove—In. 5 6 7
Smooth.....per doz. $0.95 .95 1.40
Pol'd..... " 1.70 1.75 2.60
Plan'd..... " 2.60 2.85 3.50
Four-Piece Stove—In. 5 6 7
Smooth....per doz. $0.57 .60 .93
Pol'd..... " 1.00 1.05 1.50
Plan'd..... " 1.50 1.70 2.00

EMERY—TURKISH.

Size .....5-lb. pkgs. ⅛ kegs. kegs.
No. 60 to 150, ⅜ lb. 6¼c 4¾c 4¼c
Flour.... . " 5¼c 3¾c 3⅜c

ENAMEL—IRON.

English, ¼-pt. cans...per doz. $1.50
Nubian, " " ... " 1.80
O. V. B., " " ... " 1.25
Peerless 1 50

EXTRACTORS—PIG.

See Forceps, Pig.

EYES.

Bright Wire Screw—See Goods, B. W.
Drifting Pick .....60&10%
Hooks and—
Brass.....60&5%
Iron .....65&10%

FASTENERS, STORM SASH.

Moore's.....per doz. $0 80
Schroeder's..... " 1 50
Sensible..... " 1 10

FASTENERS, BLIND.

Zimmerman's.....Net

FAUCETS.

Angle Plug.....per doz. $0 84
Brass—Andrew's .....60&10%
Petroleum.....60-10&5%
Wood—Cedar .....40&50%
Cork Lined.....60%
Metal Key.....65&5%
Measuring—Enterprise.....35&3%
See also Cocks.

FILES AND RASPS

Arcade .....75&5%
Black Diamond.....70&10%
Disston's .....75&10%
Great Western.....75&5%
Keystone Mill.....80&20%
Kearney & Foote .....75&5%
Mill, 2d quality.....80&10&5%
New American.....75&10&5%
Nicholson's .....70&10%
Royal Mill .....80@20%
N. S. A.....70&10&5%

FILTERS.

Improved Natural Stone. $3 50@13 50
Subject to large discounts.

FORCEPS—PIG

Barber's.....per doz., $7 25
Superior..... 4 75
Whisson's Imp..... 6 00

FORKS

Barley—
Steel.....66⅔, 10&5%
Wood, 4 tines, $5.25; 6 tines, $6.25 doz
Coal.....70, 10&2½%
Coke .....70, 10&2½%
Cottonseed.....70, 10&2½%
Hay—
Diamond, 2 tine.....65, 10&5%
" 3 " .....60, 7½, 10&5%
" 4 " .....66⅔, 10&5%
Golden Eagle, tine 60,7½,10,10&5%
" " " ..66⅔,10,10&5%
Digging..... .....65&10&5%
Scoop .....70&10%

FORKS—CONTINUED.

He.der—
I iamond, 2 tine.........67½&10&5%
" 3 " ......60, 20, 10&5%
" 4 " ....66⅔&10&5%
Golden Eagle, 4 tine......10&10&5%
Ma.ure—
Liamond ....60 20, 10&5%
Golden Eagle..........60, 20, 20&5%
Ore..........................70&10%
Spading—
Diamond ....70, 5, 10&5%
Golden Eagle.............70, 5&10%

Hack Saw— FRAMES
Crown..............per doz., $ 8 75
Miller's Falls....... " 10 00
Star................ " 2 85

FREEZERS—ICE CREAM

Arctic—Qts... 1 2 3 4 6
Each.......$1 10 1 30 1 50 1 75 2 30
Qts.............. 8 10 12 15
Each............$2 85 3 75 4 50 5 20
White Mountain, with Crank—
Qts......... 1 2 3 4 6
Each $1 20 1 65 1 90 2 10 2 70
Qts.............. 8 10 12 15
Each $3 60 4 60 5 90 7 00

GATES.

Molasses and Oil.
Perfection....................50&5%
Stebbin's.................75&10&5%

GAUGES.

Butt and Rabbet.
Stanley R. & L. Co.'s ..20&10&2½%
Cream Pail, Fairmont, per doz..$3 75
Marking, Mortise, etc...........
....50&10%@50&10&5%
Saw—Atkin's sgle. 55c, dbl. 80c pr doz.
Wire.
Disston's.........................25%
P. S. & W. Co.'s..................20%

GIMLETS.

Discount......... .....40@40&10%

GLASS—WINDOW.

Single and double strength, 6x8 to 16 x24............................ 90&5%
Larger sizes ....90 10&5%

GLASSES—LEVEL.

Stanley R. & L. Co.............50&5%

Bulk. GLUE.
B Amber ....per lb 9¾c
A White................per lb 12½c
H. S. Amber............per lb 17 c
Liquid.
Eagle ....40 %
LePage's—
List "A"...................37½%
List "B"...................33⅓%
List "C" ....25 %

GOODS.

Bright Wire.................. 80&15%

GREASE, AXLE.

Wood Boxes.
Diamond..............per gr. $5.00
Frazer's....................... 9.25
Hub Lightning.................. 5.25
Paragon........................ 6.75
Wood Pails.
Frazer's, 15 lb. 78c, 25 lb. $1.30 each.
Hub Lightning, 15 lb. 52c, 25 lb. 68c each.
Tin Cans.
1 lb. Frazer's carriage, pr. doz. $1.30
1½ lb. " wagon.. " 1.30
3 lb. " " " 2.40
5 lb. " " " 3.50

GRIDDLES

Soapstone ....40&5%

GRINDSTONES

Family—In.......... 7 8 9
Per doz $8 25 9 50 11 00
Loose.
Per ton ....$20 00@$21 00
Mounted—
Ball Bearing....... 1 2 3
Each $3 30 3 10 2 95
Common Bearing.. 1 2 3
Each $2 90 2 70 2 55

HAFTS—AWL

Brad—Common........per doz., $0.18
Peg—
Common.............. " 21
Patent, plain top..... " 46
" leather top .. " 52
Sewing—
Common.............. " 21
Patent.............. " 52

HALTERS

Jute Rope.............per dz $0 80
Sisal Rope........... " 1 95
Web .... " 2 10
Leather, rope tie...... " 6 25
" leather tie... " 8 25

HAMMERS—HANDLED

Blacksmiths' Hand
Maydole's ....40&10%
Engineers'—
Maydole's ....40&10%
Farriers'.
Maydole's ....35&5%
Machinists'.
Maydole's ....40&10%
Nail.
Ajax.................per doz $5 75
Calumet.............. " 3 40
Cast............ per doz $1 10@$1 50
Maydole's ....30&7½%
Vulcan ....35&5%
Riveting.
Maydole's......................35&5%
Shoe.
Cast....................per doz 75c

Tack.
All Iron ....per doz $0 35
Pol'd Iron, Hickory hdl " 0 52
Mall. Iron, Inlaid....... " 1 50
Magnetic 1 2 3
Per doz...... 70c 80c 95c
Magazine..............per doz $4 75

HAMMERS—HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs....................70&10%
5 lbs. and over 75%
Masons'—Single & Double Face..75%

Auger. HANDLES.
Common Ass'd........per doz $0 36
Peck's Adjustable.... " 2 10
Roger's " .... " 4 15
Ives' " ....per set 1 25
Axe..................................40%
Chisel.
Hickory, Tanged Firmer, Assorted, 24c; Large, 26c per doz.
Hickory, Socket Firmer, Assorted, 18c: Large, 21c per doz.
Applewood, Tanged Firmer, Assorted, 27c; large, 36c per doz.
Applewood Socket, Firmer, Assorted ....per doz 24c
Coal Pick............................40%
Drifting Pick........................40%
File, assorted 13c. large 16c per doz.
Hammer.
Adze Eye...............per doz 42c
Blacksmiths'.......per doz 45c@65c
Machinists'......... " 39c@58c
Hatchet..................per doz 42c
Hay and Manure Fork..............40%
Hoe and Rake ....40&5%
Saw, Plain 72c, Varnished 68c per dz.
Screw Driver, Assorted 42c, Large 48c per doz.
Shovel and Spade ....40&5%

Barn Door—HANGERS
King ....per doz. prs., 5 00
Monarch ....60&10%
"Never Jump" Hinge.......50&10%
Peerless, Loose Axle........60&10%
Perfection, Roller Bearing..70&5%
Phœnix, Roller Bearing... 70&5%
Prouty ....per doz. prs., $5 50
Rival. .... " " 3 90
Superb .... " " 6 25
Safety Flexible " " 6 65
Wagner's Adjustable.......70@10%
Warehouse 60%
Conductor Pipe—
Iwan's Perfection.................50%
Parlor Door—
Acme...................per set $8 75
Ives' Improved .... " 2 50
Lane's Standard....... " 3 50
" New Model.... " 2 80
Prouty................ " 3 00
Lundy.........................50&10%
Eave Trough—
Baker's.................per gr., $2 60
Imperial 10%
Wire 25%

HASPS.

Hinge, Wrought.................70&5%
With Staples—See Staples.

HATCHETS.

Ajax ....40&10&5%
Blood's........................40&10%
Cast Claw.........per doz $1 50@$1 75
Cast Shingling.... " 1 20
Duffy's Barrel...........per doz 17 50
Germantown ....35&5%
Hammond's...................30&10&5%
Roger's Ideal.............per doz $5 25
Underhill's Star Lath...............40%
S. A........................30&10%

HAY RACK BRACKETS.

Wenzlemann's No. 1, per doz...$12 60
" No. 2, " ... 13 20

HINGES.

Blind.
Clark's Gravity, per doz sets....80c
Parker's...........................65%
Shepherd's Noiseless, for Wood casing.... ....doz. $1 05
Gate.
Clark's, 1 2 3
Hgs & Ltchs, dz.. $2 35 $2 60 $3 60
Hinges Only, " .. 1 70 1 90
Latches Only, " .. 0 70 0 75
Knuckle............per doz prs $6 00
Leed's............ " sets 6 75
Superior .... " prs 9 25
Spring.
American..........................25%
Bommer Bros. Ball B'rng Floor 40%
Bommer Bros. Spring Hinges .40%
Chicago........................25&5%
Clover Leaf............per gro $9
Columbia Dbl. Acting....40&10&5%
Gem 25%
Ideal Detachable,....per gro $12 00
New Idea .... " 9 60
Oxford.............................20%
Wrought Iron.
Light Strap Hinges.........80&10%
Heavy Strap Hinges.......... ....80-10-10&5%
Light T Hinges............75-10&10%
Heavy T Hinges...............75&10%
Extra Heavy T Hinges........ ....80-10&5%
Cor. Heavy Strap ....80-10-10&5%
Cor. Ex. Heavy T ....80-10&5%
Screw Hook and Strap.
6 to 12in............per 100 lbs. $4.00
14 to 20in .... " " 3.75
22 to 36in .... " 3.50
Screw Hook and Eye.
⅜ to 1in ....per 100 lbs. $6.50
⅝in .... " " 8.00
½in .... " 10.00

HOES.

Garden.......................75&10&5%
Grub:
Ajax ....50&10&5%
Extra..........................60&10%
Hazel....................per doz $6 25
Ladies' and Boys'.....70. 10, 5, 10&5%
Mortar.................75, 7½, 10&5%
Planter's Eye............60&10&2½%
Weed ....70, 10, 10&5½%

HOOKS.

And Eyes.
Brass ....50&10&5%
Iron.............................65&10%
Awning.................per gro $1 80
Belt ....75&5%
Bench—See Stops, Bench.
Box, In. 6 8 10 12
Doz.. $1 25 $1 60 $1 70 $2 25
Humason & Beckley's...pr dz $2 40
(See Goods, Bright Wire.)
Bush.
Common Axe Handle .... per doz $7 00@$8 50
Hamilton Pattern.....per doz $7 25
Chain—In. ¼&5-16 ⅜ 7-16 ½
Per 100 $7 50-7 75 $9 50 $11 25 $12 00
Clothes Line.
Japanned...........per doz 21c@22c
Galvanized......... " 35c
Coat and Hat.
Cast Iron.........per gro 72c@$1 00
Gem Wire......................65&10%
Conductor.
Malleable........50&10%@50&10&5%
Wrought...............40&10%@50%
Corn.
Common, unpolished, per doz. $1 30
" polished... " 1 70
"Cut Easy," ....per doz. 2 65
Clyde's, ... " 2 40
Brooke's............... " 2 65
Gate.—See Goods, Bright Wire.
Grass.
Common, Nos. 2 3 4
Per doz.......... $1 70 $1 75 —
German ....per doz $1 90
Little Giant........... " 3 10
Wood's............ ... " 1 30
Hammock.
Common................ " 21c
With Plate............. " 36c
With Screw............ " 36c
Piggot's............... " $1 05
Lambrequin or Drapery...per gro 21c
Picture ....50%@50&10%
Potato and Manure.......70&10&7½%
Screw, Brass....................80&20%
(See Goods, Bright Wire.)
Seat Spring ....per lb 6½c

HOOPS—TUB.

Ever Ready............ per case $1 65

HOSE—GARDEN.

Ply 3 4 5 6 8
Black, pr ft. 7½c 8½c 9¾c 10¾c 12½c
Cotton, 3 ply..................per ft 6¾c
Red, 3 ply .... " 7¾c

HUSKERS.

Boss.
Nos. E A B P PX
Dz.$1 85 $2 00 $1 95 Gr.$5 90 $5 20
Nos.2000 3000 4000 O OX
Gr.$3 10 $6 75 Dz.$1 15 $2 20 $1 65
Brinkerhoff's ....per gro 14 50
Harrington............ ....per gro 4 20
Ideal—Nos. 102 101 100
Per doz...... $1 35 $2 50 $2 75
Johnson's ....per gro 7 75

IRON.

See Metals—First column.

IRONS.

Curling.
Common ....per doz 33c@48c
Princess...............per doz $0 60
Yale.................... " 0 84
Oxford.................. " 1 10
Ruby .... " 1 50
Tourist, Folding ...... " 0 90
Pinking................ " 0 60
Plane.
Wood Bench.....................20&5%
Stanley R. & L. Co. (new list)25&5%
Sad.
Charcoal...............per doz $11 25
Common, Polished, per 100 lbs 3 50
" Nickel Plated, " 4 75
Chinese Polishing.....per doz 7 60
Laundry, No. 1, $5 75; No. 2, $6 25 per doz.
Mrs. Pott's.
No. 50 J, Enterprise...per set 76c
No. 55 J, " ... " 73c
No. 50 T, " ... " 79c
No. 55 T, " ... " 76c
No. 50, Howells .... " 77c
No. 55, " .... " 74c
Tailors' Sad ....per lb 4¼c
" Geese........... " 4¼c
Tuyere.
Single Duck Nest.....per doz $5 25
Double " " ..... " 6 25
Sutton....................each 2 60

JACKS.

Locomotive ....75&5%
Wagon.
Meeker's ....per doz $1 25
Miller's No. 2 .... " 7
Winner................ " 7

KETTLES.

Brass 20%
Caldron............................ 50%
Copper ....per lb 27½c
Maslin ....65&10%
Sugar........................50&10&5%

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade.dz $4 25
" 12-in. Straight " .dz 2 50
Cooper's Hoop ... .15%
Corn.
Acorn.................per doz $2 60
Ajax.................... " 2 25
Clipper, Light, $1 75; Heavy, $1 90 per doz.
Disston's..............per doz $3 15
Easy .... " 7 75
Rugged Razor .... " 2 40
H. S. Earle's .... " 3 15
Drawing.
Standard...........................70%
Adjustable 20%
Barton's Carpenters'.........10&5%
" Folding Handle....25&5%
Hay.
American, Sickle Edge...doz $10 25
Canton, Sickle Edge...... " 8 25
Heath's.................. " 8 25
Iwan's Sickle Edge.......... 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern....... " 6 25
Wadsworth's Sp'r Point " 8 75
Hedge.
Ajax, Heavy, $5 75; Ex. Heavy, $7 75 per doz.
Mincing.
Common, Single ....per doz 48c
" Double........ " 65c
Streeter, 4 Blade, $1 30; 6 Blade, $1 90 per doz.
Putty.
Common.................per doz 84c
Goodell's........per doz $1 20@$1 80
Russell's. ...... " 1 75@ 2 25

KNOBS.

Base, 2¼-in. Maple, Rubber Tip, ...per gro $1 60
Door, Mineral...........per doz 0 80
Porcelain .... " 0 90
Jet..................... " 0 85
Picture.....................60&10&5%

LADDERS.

Common Long ....per ft 8½c@13c
Extension ....per ft 10½c
Step.
Common.................. " 6½c
" With Shelf, add 10c.
I X L.......................per ft 17c
Miller's Household. per ft 13c@15c

LANTERNS.

Bull's Eye Police.
3-in Flash Light.......per doz $6 00
2¾-in Regular.......... " 4 00
3-in Regular........... " 5 00
Tubular, Berger...........40&10&5%

LEADERS—CATTLE.

Nos. 1 2 3
Per doz.... $0 70 $0 85 $3 75

LEATHER—LACE.

Cut ....50&10%
Sides, Ex. Quality........per sq ft 30c

LEATHERS—PUMP.

Valve and Plunger.....................50%

LIFTERS.

Stove Cover.
Japanned...............per gro $2 75
Coppered.............. " 3 60
Chilkoot............... " 4 [illegible]
Devore's............... " 5 50
Zero .... " 3 90
Transom, Payson's..............70&10%

LINES.

Chalk, Twisted in 20-ft hanks.
Nos. 15 14 13 12 11
Per doz.. 10c 12c 17c 22c 29c
Twisted in 50-ft balls.
Nos. 1 2 3 4
Per doz..... 24c 30c 36c 44c
Braided in 20-ft hanks.
Nos. 0 1 2
Per doz..... ...... 23c 26c 32c
Masons', in 100-ft hanks...doz $1 60
Clothes.
60-ft Jute ....per doz $0 95
72-ft " .... " 1 10
60-ft Sisal .... " 1 60
72-ft " .... " 2 10
60-ft Cotton............ " 1 35
50-ft Braided Cotton.............95%

LINING—STOVE.

In Bricks.................per crate 42c

MACHINES.

Boring Without Augers. With Augers.
Ajax ......per doz $5 25 $6 75
Angular... " 3 25 5 00
Boss ...... " 4 50 5
Upright... " 2 90 4
Leather Riveting.
Chicago, Pomeroy ....per doz $9 75
Excelsior.............. " 2 50
Handy.................. " 2 10
Little Giant............ " 3 10
Pony, Pomeroy........ " 8 00
Washing.
Boss. 1 2 5 3
Per doz.. $57 00 $63 00 $69 00 $60 00
Globe, No. 1..........per doz $51 00
O K Rotary........... " 58 00
Round Wayne........ " 36 50
U. S. Steel............ " 60 00

MALLETS.

Carpenters'.
Fibre Head, Small. Med. Large.
Per doz..... $5 00 $5 75 $6 75
Round Hickory........per doz $1 75
" Lignumvitæ.... " 2 75
Square Hickory....... " 1 75
" Lignumvitæ .. " 3 25
Tinners'.
Applewood .... " 1 65
Hickory................ " 0 90
Hickory Sheet Iron. "

MATS.
Door.
National Rigid......60&5%
Queen Flexible......50%
Stove.
Standrd Quality......per gross $2 75
Best " (Pure) " 4 75
Wire Covered Asbestos, Ex. Heavy......per doz 1 00

MATTOCKS.
Ajax......50&10%
Extra......60&5%

MAULS.
Iron, lbs. 10 13 16 18 21
Per doz. $3 40 $4 20 $5 00 5 50 $6 00
Wood face, lbs. 10 11 12
Per doz...... $4 75 $5 00 $5 25
Wood Choppers'.
Lake Super'r & Oregon Pat. 70&10%

MEASURES.
½ pk 1 pk ½ bu
Galvanized..per dz $3 75
Japanned.... " $1 50 2 25 $2 90
Iron Bound. " 1 40 1 70 2 00

METAL.
Babbitt.
Aim......per lb 8¼c
Best...... " 23c
Common, No. 4...... " 6½c
Copper Mixed...... " 18½c
Magnolia Metal...... " 19c
Tony...... " 10¼c
See Metals—In first column.

MICA.
First Quality......40, 10&5%
Second Quality......60%

MILLS—COFFEE.
Enterprise......25&5%
National......30%
Parker......50&10%@60%

MOPS.
Erie......per doz $3 15
Handled Cotton.
Lbs. ¾ 1 1¼ 2
Per doz.. $1 85 $2 20 $2 50 $3 15

MOWERS—LAWN.
Ball-Bearing.
In. 15 17 19 21
Each...... $7 50 $8 50 $9 50 $10 50
Champion.
In. 12 14 16 18 20
Ea.. $2 30 $2 35 $2 35 $2 65 $2 75
Champion, High Chief.
In. 16 18 20
Each...... $4 00 $4 50 $5 00
Cheap Grades.
In. 12 14 16 18
Each...... $2 10 $2 10 $2 10 $2 20
Clipper......50&10&10%
Girard, in. 14 16
Each...... $3 75 $4 00
Philadelphia.
All Styles Except A & E 60&10&10%
Style A......50&10%
Style E, High Wheel..60,10,10&10%
Drevels......50%
All Day......Net Price

MUZZLES.
Horse.
Nos. 1 2 3 4 5
Doz. $0 30 $0 50 $0 55 $0 70 $1 00

NAILS.
Horse Shoe.
Ausable......50%
Capewell......10%
Perfect......40&5&
Putnam......33⅓%
Star......35%
Picture.
Brass Head......40&10%
Judd's......40&10%
Brads......80&10&10%
Wire Nails—Small lots......$2.30
Car load lots...... 2.20

NETTING—POULTRY.
Galvanized Before Weaving. 80&20
" After Weaving...80&15
Cut Pieces......65&5%

NIPPERS.
End Cutting.
P. S. & W. Co......40&5%
Stubb's Pattern......40&10&5%
Hoof.
Heller's......40&5%
P. S. & W. Co......40&10%
V. & B......40-5%

NOZZLES.
Hose.
Genuine Boston......per doz $3 40
Genuine Gem...... " 3 60
Magic...... " 3 60

NUTS—HOT PRESSED.
Square Blank.
In. ¼ ⅜ ½ ⅝ ¾ ⅞ 1
Lb. 7¾c 5¼c 4¾c 4⅝c 4⅝c 4½c 4¼c
Square Tapped.
In. ¼ ⅜ ½ ⅝ ¾
Lb. 14c 9½c 7¼c 6½c 6¼c

OILS.
Linseed, Pure boiled......per gal 37c
" " raw...... " 36c

OILERS.
Chase Pattern.
Brass and Copper......35%
Zinc......60%
Engineers'.
Cannon......50%
Tin......per doz $2 75@$3 25
Machine.
Ajax......per doz $0 80
Copper Plated Steel... " 1 50
Malleable Iron......40&10&5%
Tin......per doz 55c@65c

OPENERS.
Box, in. 10 12 14
Flat....per doz $2 85 $3 60 $4 15
Round.. " 3 10 3 25 3 "
Can.
American......per doz $0 26
Delmonico...... " 1 25
Never Slip...... " 0 45
Perfect...... " 85

Tip Top...... " 0 84
Crate, V. & B...... " 5 75

OUTFITS—COBBLING.
Combination......per doz $11 50
Economical...... " 4 90
Family...... " 10 00

PADLOCKS.
Standard Wrought......70&10&5%
Champion......50%
Eureka......40&10&5%
Yale......60&5%

PAILS.
Cream.
14-qt., Without Ga....per doz $2 75
20-qt., " " .... " 3 25
20-qt., With Gauge.... " 4 20
Sap, 10-qt., Galvanized, $1 60; 12-qt., Galvanized, $1 85 per doz.
Stock, Galvanized.
Quarts. 14 16 18 20
Per doz... $3 75 $4 00 $4 65 $5 25
Water, Galvd, qts. 10 12 14
Per doz...... $3 00 $3 30 $3 60
Wood.
Cable, 2-Hoop, $1 70; 3-Hoop, $1 90 per doz.
Cedar, 3-Hoop, $2 50 per doz.
Standard, 2-Hoop, $1 55: 3-Hoop, $1 75 per doz.

PANS.
Dripping......50&10&5%
Fry, Common......60&10&5%
Acme......66⅔&5%
Roasting.
Brownie......Each 30c@37c
L. & H...... " 58c@80c

PAPER.
Building.
Plain......per 100 lbs $1 15
Tarred...... " 1 25
Tarred Felt...... " 1 80
Diamond A, Red Rosin. pr roll 0 63
Leader, Red Rosin..... " 0 48
Sand and Emery.
Ajax......50&10%
B. & A......50 & 5%
Wrapping.
Grecian Express......per lb 3¾c
Rag...... " 2½c

PARERS.
Apple.
Bay State......per doz $13 00
Reading...... " 6 75
Turntable...... " 6 00
White Mountain...... " 5 25
Potato.
Goodsell's Saratoga..per doz. $6 50
White Mountain...... " 6 00

PICKS
Adze Eye Ore......60&5%
Drifting and Poll Picks......60&10%
Ajax Railroad......50&5%
Extra Railroad......60&10%
Surface......60&10%

PINCHERS.
Carpenters', wrt. iron, pol. steel jaws......30%
Blacksmiths'......50%
P. S. & W......40&10&5%

PINS.
Clothes.
Common......per gr..$0 12
Hoyt's...... " .. 30
U. S...... " .. 70
Picket.
Fluted......per doz..$0 90
Round...... " .. 1 75
Spiral...... " .. 1 90

PIPE.

Conductor.	Nested	Not nested
Eastern	70&12½%	70&7½%
Central	70&7½%	70%
Southwst'n..	65-&7½%	65&2½%
Mo. River	70&7½%	70%
Southern	65&10%	65&5%

Lead.
Full coils......per lb..$0 6
Cut " ...... " .. 6¼
Stove.
Acme—In. 5 6 7
Smooth, per jt. 10½c 10½c 12½c
Planished, " ..22c 23c 43 c
Peerless--Smooth..8½c 9c 11½c
Polished. 16c 18c 22 c
Planished 28c 31c 40 c
Made-up—In. 5 6 7
Smooth...... 8¾c 9c 12 c
7 to 6 in. Smooth Tapers, pr jt..14c
6 in, Smooth T's...... " ..30c
7 to 6 in. Planished Tapers......45c
Wrought Iron Gas Pipe.
⅜-in., black......discount, 60%
½ " ...... " 63%
¾-in. to 4-in, black.... " 69%
4½ " 6 " .... " 66%
7 " 12 " .... " 64%
⅜ " galvanized " 48%
½ " " " 50%
¾ " to 4 " " 56%
4½ " " 6 " " 52½%
7 " " 12 " " 50%

PLANES.
Ohio......60&5%
Stanley Planes, new list..30%@30&5%
Bailey Planes......35%
Sandusky......30%

PLANTERS.
Corn,
Monitor......per doz..$7 75
Triumph...... " .. 6 00
Potato
Acme......per doz.. $6 25
Challenge...... " .. 10 75
Fencing.
Cronk's......per doz..$9 25
Farmers' Choice..... " .. 8 75
Russell's...... " .. 8 65
Flat and Round Nose.
Bernard's......30%
German......50%
Lodi......40%
Paragon......40&10%
P. S. & W. Co......60%
Gas—In. 8 10 12
Per doz...... $3.10 $4.00 $4.90

PLUMBS AND LEVELS.
Common......75%@75&10%
Cook's......40%
Davis' Iron......30%
Davis' Inclinometer......20%
Stanley's
Nos. 00S 0S 2S 3S
Per doz..$4.50 $5.20 $7.60 $8.65
Nos. 30 25 50 35
Per doz. $13,00 $17.50 $17.50 $12.35

POINTS. Discount
Drive Well Points......80&10&5%

POKERS--STOVE.
Wr't Iron, str't or bent, per doz. $0 50
Wr't Iron, wood hand'ls " 75
Nickel pl'td. coil hdl's.. " 70

POKES--ANIMAL.
American......per doz......$2 60
Brown's, wr't steel " ..$5 25@6 25
Eagle...... " $4 25
Success...... " 2 60

POLES--FISHING.
Bamboo
Ft. 12 14 16 18 20
Pr 100..$2.75 $3.40 $4.75 $6.00 $7.75

POLISH.
Metal.
Pride of the Bar..... " .. 1.60
Putz Cream.
Pts. 1-6 ¼ ½
Per doz......$0.84 $1.25 $1.80
Pts. 1 2 4 8
Per doz. $3.60 $6.00 $9.00 $18.00
White Silk, half pints, per doz. $2.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine
Pts. 1-6 ½ 1 2
Per doz...$0.68 $1.30 $2.15 $3.00
Shoe.
M. D. C......per doz..36c@50c
F. C. O...... " 40c
T. M...... " 50c@$1 25
Imperial......per gr......$5 00
Stove.
Black Eagle, 1 lb cans, pr gr..$15 60
Black Silk—
5 lb. pail...... 70c
Paste, 5 oz. cans per doz.....$1.00
Paste, ½ lb. cans, per doz... 1.00
Black and Japanned—
Liquid, ½ pint cans per doz. 1.00
Liquid, 6 oz. cans per doz.... 75c
Steel Range Gloss per doz... 1.75
Blackene, 1 lb cans....pr gr.. 12 00
Black Jack, ¾ lb cans. " .. 9 00
Dixon's Carb. of Iron. " .. 5 75
Nickel Plate...... " .. 4 50

POPPERS, CORN.
Round or Square, 1 qt. per doz., 85@95c
Square, 1½ qt......per doz., $1 00
Square, 2 qt......per doz., 1 25
1 qt. reversible......per doz., 1 50

POTS—FIRE.
Bernz......each..$3 85
Clayton & Lambert's, each, $4 75@6 25
Gate City......each.. 6 25
Gem...... " .. 6 75

POWDER.
See Ammunition.

PRESSES—FRUIT AND JELLY.
Enterprise Manufacturing Co... 25%
Henis......per doz. $2 10

PRUNERS.
Disston's Pole......per doz..$7 50
Henry's Improved..per doz..65&10%
Water's Improved. " 70, 10&5%

PULLERS.
Cork.
Modern......each..$2 60
Quick and Easy...... " .. 2 90
Nail.
Giant......per doz..$9 00@10 50
Giant Pattern. " .. 6 00
Tack—Giant.... " .. 60

PULLEYS.
Awning--Jap'd......40&5% to 35&5%
Clothes Line......20&10%
Hay Fork.
Iron Wheel, 5 in......per doz..$1 70
Wood Wheel, 6 in... " .. 1 60
Wood Wheel, 6 in... pass knot...... " .. 1 75
Hot House--Jap'd......30&5%
Screw...... " ......30&5%
Side...... " ......30&5%
Sash.
Chicago......per doz..$0 20
Clark's...... " .. 43
Common Sense, 2 in.. " .. 27
" Pattern, 2 in.. " .. 22
Empire...... " .. 24
Ideal...... " .. 24
Grand Rapids, No. 17 " .. 24
" " No. 11 " .. 25

PUMPS
Pitcher Spout.
Nos. 1 2 3 4
Each......$0.95 $1.05 $1.15 $1.40
Spray.
Blizzard......per doz..$14 25
Cyclone, tin...... " .. 3 90
" copper..... " .. 6 75
Daisy...... " .. 8 75
Little Giant......each.. 2 40

PUNCHES.
Conductors', No. 22....per doz..$2 50
Machine......per lb.. 19
Saddlers'.
Common......per doz..60c@70c
Good...... " ..72c@84c
Spring.
1 Tube......per doz..$3 25

PLATES--TIN.
See Metals in Column 1.

PLIERS.
Button's--In. 4½ 6 8 10
Per doz.....$2.60 $3.10 $3.90 $5.20
Button's Pattern.
In. 4½ 6 8 10
Per doz.....$2.35 $2.50 $3.45 $4.40
Cutting.
Cronk's Comb......per doz..$6 25
Bernard's......30%
Lodi......40&10&5%
Stubb's......50%
4 Tube, revolving.... " .. 5 25
Tinners'.
Hollow......40%
Solid......each..5½c

PUTTY.
In Bladders.
Strictly pure......per 100 lbs. $2 25
Commercial...... " " 2 10

RAIL.
Barn Door.
Light Wrought......per ft. 3c
Safety...... " 5¼c
Single Flange...... " 1⅞c
Smith's Wro't Bracket—plain 3¼c
Smith's Special......4½c
Smith's "Never Jump".....11c 50%
Smith's Plain Steel......30%
Smith's Milled Steel......4½c
Sliding Door.
Painted iron......per ft. 4¼c
Bronzed wr't iron...... " 8½c

RAKES.
Coal or Road......per doz. $5.25
Garden.
Steel, braced......70&10&5%
Steel, bow......70,5,10&5%
Malleable iron, heavy......70@10%
Hay—Wood......per doz. $1 05@1 70
Lawn—Wood.
Common......per doz. $2
Automatic...... " 6 00
New Lawn Queen.... " 3 60
Jumbo, 36 teeth...... " 5 75

RASPS—See Files.

REGISTERS.
List July 1, 1903.
White Japanned......75&10%
Nickle Plated......75&10%
Copper......75&10%
Electro Plated Brass......50%

RINGS
and Ringers—Hog.
Blair's Rings......per doz. 60c
Blair's Ringers...... " 84c
Brown's Rings...... " 65c
Brown's Ringers...... " 90c
Champion Rings...... " $2 35
Champion Ringers...... " 1 70
Hill's Rings...... " 48c
Hill's Ringers...... " 70c@95c
Mazor Rings...... " 80c
Mazor Ringers...... " $1 15
Perfect Rings...... " 84c
Perfect Ringers...... " $1 05
Wolverine Rings...... " 1 50
Wolverine Ringers.... " 70c
Bull.
Copper, 2½-in. 3-in.
per doz...... $1 35 $1 70
Steel......per doz. 95 1 05
Steel, Nickel Pl't'd, 2½-in., doz. 1 35
Rea's Self Piercing......$1.95
Fruit Jar—White......per lb. 30c
Key.
Split, round......per doz. 1
Split, square...... " 32c
Ball, round...... " 32c

RIVETS.
and Burrs.
Copper Belt......50&10&5%
Coppered Iron......75%
Tinners'......66⅔@60%
Hame......per lb.
Slotted Clinch......per doz. 70c@75c
Tubular—Nos. 1 and 2, assorted sizes......per doz. 60c

ROPE.
Per lb.
Manila, 7-16 inch diameter and larger...... 11¾c
Sisal, 7-16 in. and larger...... 8½c
Cotton.
¼ and 5-16-in. on reels...per lb. 12c
¼ and 5-16-in. in coils... " 12½

RULES.
Boxwood......60%
Ivory......35&5%

SASH WEIGHTS.
Per ton, f.o.b. Chicago......$30.00

SAWS.
Back.
Disston's......25&7½%
Jackson's......25&7½%
Butchers'—Disston's......35&7½%
Circular.
Disston's......50%
Hiles'......50%
Compass.
Common......per doz. $1 35@1 60
Disston's......25&7½%
Cross-Cut.
Atkin's......40%
Disston's......40&10%&50%
Pocahontas Bit......per ft. 39c
Pocahontas, Blued...... " 41c
Dehorning.
Atkins'......per doz. $5 50
Disston's...... " 5 75
Hack.
Disston's......35⅓%
Keystone......33⅓%
Sterling Hack Saw Blades......25%
Sterling Hack Saw Frames......20%

SAWS—CONTINUED.

Hand and Rip.
Brown's ..... 30&7½%
Disston's No. 7 ..... 30&7½%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 ..... 25&7½%
Gorham's Comb ..... 30&7½%
Keystone ..... 30&7½%
Sam Sickles', hand ... per doz. $4 25
"I Will," hand ..... " 5 75
"I Will," rip ..... " 6 75
"U. S. A." hand ..... " 12 25
"U. S. A." rip ..... " 14 25
Keyhole—Disston's ..... 25&7½%
Kitchen.
Sterling 25%
One Man 50%
Panel.
Brown's ..... 30&7½%
Disston's No. 7 ..... 30&7½%
Disston's Nos. D8 and 12, D100 and 112 ..... 25&7½%
"I Will" 40%
"U. S. A." ..... 40&10&5%
Pruning.
Avery's Duplex ..... 25&7½%
Brown's ..... 25&7½%
Disston's ..... 25&7½%
Wood.
Common ..... per doz. $4 50
Handy ..... " 7 50
Happy Medium ..... " 7 00
Wood Sawyers' Delight " 8 25

SAW SETS.

Common Lever ..... per doz. $ 1.20
Stillman's Lever ..... per doz. 1.30
Leach's ..... per doz. 5.00
Nash's ..... per doz. 4.20
Monarch ..... per doz. 6.50
Aikin's Pattern ..... per doz. 3.50

FRAMES—SAW.

Common, plain ..... per doz. $1 20
" painted ..... " 1 60
Counter. SCALES.
Fairbank's Standard ..... 20, 10&5%
Hatch's ..... per doz. $21 50
Little Detective, 1 2 3
Each $2 60 2 25 2 10
No. 1 Tea ..... per doz. 7 75
Union Platform ..... each 2 35
Pelouze 25%
Turnbull's Market 50%
Platform.
Common, 500 800 1000
Each $8 75 9 75 10 75
Chicago Standard ..... 30 to 33⅓%
Fairbank's Standard 40%
Osgood 50%

SCOOPS.

Ames ..... 10&10%
Eastern Pattern. Socket Strap.
Nos. 2 3 4 5 6
Per doz. $7.00 7.25 7.50 7.75 8.00
Nos. 7 8 9 10 12
Per doz. $8.25 8.50 8.75 9.00 9.50
Western Pattern. Socket Strap.
Nos. 1 2 3 4 5
Per doz. $7.00 7.25 7.50 7.75 8.00
Ajax. *Eastern Pattern,*
Nos. 2 3 4 5
Per doz. $5.25 5.50 5.75 6.00
Nos. 6 7 8 9
Per doz. $6.25 6.50 6.75 7.00
Ajax. *Eastern Pattern,* extra heavy,
Nos. 3 5 6 7
Per doz. $7.25 7.75 8.00 8.25
Ajax. *Western Pattern,*
Nos. 4 5 6 7
Per doz. $5.75 6.00 6.25 6.50
Nos. 8 9 10 12
Per doz. $6.75 7.00 7.25 7.75

SCRAPERS.

Box.
Stanley's Adjustable, per doz. $3 60
Triangular ..... " 2 10
Cabinet.
Ajax ..... per doz. $2 25
Cast Steel ..... " 65c@75c
Stanley's No. 80 ..... " $6 40
Road.
Cubic ft. 7 5 3
Without runners, ea. $5.00 4.75 4.50
With runners ..... " 5.25 5.00 4.75

SCREWS.

Bench.
Iron 30%
Wood, white maple .. per doz. $2 60
Hand—Wood 30%
Hand Rail ..... 70&10%
Jack ..... 75&5%
Lag or Coach, Gimlet Point 75%
Screw—Centennial.
Nos. 1 2 3 4
Per doz. 22c 25c 32c 36c
Wood.
F. H. Bright Steel ..... 87½&10%
R. H. Blued Steel ..... 85&5%
F. H. Jap'd Steel ..... 82½&5%
F. H. Brass ..... 85&5%
R. H. Brass ..... 80&5%
R. H. Nickel Plated 75%

SCYTHES.

Clipper, grain ..... per doz. $9 25
Dutchman, grass ..... " 6 00
Golden Clipper, grass ..... " 5 50
U. S. A., grass ..... " 7 00

SETS.

Nail.
Round, common ..... per doz. $0 33
Square " ..... " 42
Octagon " ..... " 33
Square, Buck Bros. .. " 1 25
Cup Point, knurled, pr doz. 70c@$0c
Steel.
Farmers' ..... per doz. $1 45
Tinners' ..... 50&10%
Saw.
Aiken's Pattern ..... per doz. $3 50
Common Lever ..... " 1 20
Disston's Monarch ..... " 6 50
" X Cut ..... " 11 75
German ..... " 1 35
Morrill's Old Style ..... " 5 00
" Pattern ..... " 4 50
Leach's ..... " 4 80
Nash's Hand ..... " 4 00
" X Cut ..... " 5 50
Stillman's Lever ..... " 1 30
" X Cut ..... " 2 50

SHARPENERS—SKATE.

Diamond ..... per doz. $1 60

SHAVES—SPOKE.

Iron ..... per doz. $1 35@$2 75
Wood ..... " 2 75@ 4 75
Bailey's ..... 50&5%
Goodell's 15%
Stanley's Universal ..... 30&5%
Pruning. SHEARS.
Buckeye, No. 1 ..... per doz. $6 50
" No. 2 ..... " 8 50
California Pat., 9 in. " 4 25
" 10 in. " 5 00
Draw Cut, No. 3 ..... " 15 50
" No. 4 ..... " 18 50
Henry's Pat. 0 01 14 012
Per doz. $1.90 $2.50 $3.15 $3.50
Star ..... per doz. $4 75
Sheep—No. BBA.
6 in. 6½ in. 7 in.
Reg. Grip .. $11.00 $11.35 $12.00 doz.
Nar. Grip .. 11.20 11.00 12.15
Tinners'—See Snips.

SHEAVES—SLIDING DOOR.

In. 3 4 5
Common .. Per set .. $0.42 $0.48 $0.70
Hatfield's " " .75 1.00 1.60

SHELLERS—CORN.

Union ..... per doz. $7 25

SHOT—See Ammunition.

SHOVELS AND SPADES.

Drain.
Iwan's Perfection 50%
Railroad, Etc.
Gold Hibbard's ..... per doz. $9 25
C. H. Conovers' " 7 75
Beckwith's " 7 75
Hickory " 6 25
Greenleaf's " 5 75
Columbus " 5 00
Ames' new list ..... Discount 12½%
Coal.
No. 2 Ajax ..... per doz. $5 25
No. 4 Golds " 6 25
Ames' new list ..... Discount 12½%

SIEVES.

Champion ..... per doz. $ .90
Hunter's Genuine " 1.10
" Imitation " .90
Tin Rim, 16 mesh plain wire" 1.35
Wood " 16 mesh plain wire" .80

SINKS.

Cast Iron.
Painted 50%
Enameled, White ..... 60&10%
Wrought Steel.
Painted, new list ..... 40-10&5%

SLEDGES—See Hammers.

SNAPS—HARNESS.

Champion 65%
German Pattern ..... 30&5%
Judd's Pattern ..... 60&10%@70%

SNATHS.

Double Ring, Bush ..... per doz. $6 50
Patent Loop " " 7 00
" " Brass " " 6 25

SNIPS—TINNERS'.

Hernisch's ..... 40&5%
National ..... 40&5%
P. S. & W. Co.'s ..... 25&5%

SOLDER.

See Metals, Column 1

SPRINGS—DOOR.

Perfect. Nos. 1 2 3 4
Per doz. 33c 38c 43c 48c
Reliance, Light $1.40, Heavy $2.20 doz.
Star " .90, " 1.20 "
Torrey's ..... per doz. $1 35
Warner's— No. 1 No. 2
Per doz. 72c $1 45

SQUARES

Steel and Iron 70%
(Add for Bluing, $2.50 per doz., net.)
Mitre—Stanley's No. 12 ..... 40%
Try.
Stanley's No. 20, new list ... 30&10%
" Nos. 12 and 14 ..... 40%
Try and Bevel—Stanley's ..... 40&5%
Try and Miter.
Fox's ..... per doz. $7 25
Winterbottom's 50%

SQUEEZERS—LEMON.

Common Wood ..... per doz. $0 72
Porcelain Lined, wood " 1 30
Boss, tinned iron " 84
Pearl, nickel plated " 1 30
Star " " 1 60
Little Giant, tin'd iron " 4 25
King " 2 50
Drum " 4 50

STAPLES.

Blind—Barbed ..... per lb. 9½@10c
Butter Tub " 8@8½c
Fence, less than carload.
Polished ..... per 100 lb. $2 40
Galvanized " 2 80
Netting—Galvanized ..... per keg 3 60
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples ..... 35-10&5%
Extra heavy ..... 75&10%

STEELYARDS.

Discount 25%

STONES.

Axe.
Hindostan ..... per lb. 5½@7c
More Grit " 9½c
Washita " 15½c
Emery ..... 60%@60&5%
Oil—Unmounted.
Arkansas Hard ..... per lb. $2 00
Arkansas Soft ..... " 1 15
Hindostan ..... " 8½@9½
Lily White ..... per lb 45c
Queer Creek ..... " 14½c
Ouachita ..... " 35c
Washita ..... " 25c
Scythe.
Black Diamond ..... per gro. $7 75
Clear Grit ..... " 4 25
Gem Corundum ..... " 7 50
Green Mountain ..... " 4 20
La Moille ..... " 7 00
Pikes Gen. No. 1, Ind. Pond., per gro 4 75
White Mountain ..... per gro. 6 50
Willoughby Lake ..... " 6 25
Red End ..... " 3 15

STOPS—BENCH.

Hotchkiss' ..... per doz. $2 60

STOPPERS—FLUE.

Common ..... per doz. 42c
Crown ..... " 48c
Gem, flat, painted ..... " 72c
Gem, cor'd, decorated ..... " 68c
Kirch's ..... " $1 20
Peerless ..... " 72c
Skinner's Common Sense " 95c

STRAPS.

Scoop ..... per doz. prs. $1 80
Skate ..... " " 60@70c

STRETCHERS.

Carpet.
Bullard's ..... per doz. $3 00
Excelsior ..... " 5 50
Malleable Iron ..... " 70
Perfection ..... " 6 00
King ..... " 4 50
Wire.
N. S. Elwood's ..... per doz. $5 75
O. S. Elwood's ..... " 5 75
Little Giant ..... " 5 50
Star Lever ..... " 8 25
Star Tackle Block ..... " 9 25
Warner's ..... " 6 25

SWIVELS.

Malleable Iron ..... per lb. 6½c
Wrought Steel ..... per gro. $4 50

TACKS.

American Cut ..... 90&5%
American Wire ..... 85&25&10%
Bill Posters Cut ..... 90&40%
Blued Carpet ..... 90&15%
Tinned Carpet ..... 90&15%
Gimp ..... 90&30&10%
Upholsters' Cut ..... 90&40&2%
Upholsters' Wire ..... 90&25%
Double Pointed ..... 90&20%
Copper ..... per lb. 27c
Canvas Nails ..... 75&5%
Clout Nails ..... 75&10&5%
Hungarian Nails ..... 60&5%

TAPES—MEASURING.

Asses' Skin ..... 40&10%
Bend Leather 25%
Patent Leather 25%
Lufkin's Steel 30%
Lufkins Metallic 30%

TENTS AND PAULINS.

Wall Tents 50%
Wedge Tents ..... 50&5%
Paulins 45%
Wagon Covers 45%

THERMOMETERS.

Tin Case ..... per doz., 95c@$1 25
Wood Back ..... " $1 75@ 9 00
Glass ..... " 15 50

TIES.

Bale.
Single Loop ..... 80&10%
All other kinds 70%
Cow—See "Chains."

TONGS.

Crimping—Packham's ... per pair 50c
Gutter—P. S. & W. Co.'s ..... 15&10%
Pipe—Brown's 50%
Roofing—P. S. & W. Co.'s ..... 15&10%

TOOLS—SAW.

Atkin's Dexter ..... per doz. $4 25
Atkin's Excelsior ..... " 6 25
Disston's Universal 40%
McDonald's 33⅓%

TRAPS.

Game.
Newhouse 50%
New Victor 80%
Mole—Reddicks ..... per doz. $5 75
Mouse and Rat.
Wood Choker ..... per hole 10c
Tin Choker ..... " 11c
Delusion ..... per doz. 85c
Imitation Sight, Rat " 80c
Marty Rat " $6 75
Marty Rat, Imitation " 3 75
Marty Mouse " 3 15
Marty Mouse, Imitation " 2 10
French Automatic ..... each $3 60
Fly.
Balloon ..... per doz. $1 10
Harper's ..... " 1 25

TROUGH—EAVE.

Eastern ..... Discount 75&10&5%
Central ..... " 75&12½%
South Western ..... " 75%
Missouri River ..... " 75&12½%
Southern ..... " 75&12½%

TROWELS.

Brick.
Standard 30%
Brade's ..... 10&7½%
Disston's 30%
Rose's 25%
Plasterers'.
Standard 33⅓%
Disston's 30%
W. & McP 25%

TRUCKS.

Bags ..... each $1 70
Handy ..... " 1 50
Warehouse ..... 60&5%
No. 1 2 3
Half Ironed $2.60 $3.40 $5.00
Full Ironed 3.90 5.75 6.75

TUBS—WASH.

No. 3 2 1 Ex. large
Standard, per doz. $5.25 6.25 7.25 9.75
Dowel .... " 5.60 6.60 7.50 10.00
Cedar .... " 6.50 7.50 8.25
Indurated. " 7.20 7.95 9.45 11.70
Galvanized.
No. 1 2 3
Per doz $5.50 6.00 6.75

VISES.

Bonney's 30%
Cheney's 30%
Parker's Oval Slide ..... 50@50&10%
Parker's Parallel ..... 15@30%
Parker's Victor 10%
Parker's Combination ..... 60&10%
Solid Box ..... 50&5%
Adam's Mechanics' ..... each $2 50

WARE.

Cast-Iron Hollow.
Ground ..... 40, 10&2½%
Unground ..... 50, 10&2½%
Extra Finished 40%
White Enameled ..... 40&5%
Maslin Kettles 65%
Enameled.
Adamant, one coat, 70&10%@75&10%
The manufacturers divide this ware into two classes, which take different discounts, noted above.
Chrysolite, three coat ..... 40&5%

WASHERS.

Leather. In. ⅜ 1 1⅛ 1¼ 1½
Nut, per C 16c 17c 19c 25c 32c
Collar, per C 35c 40c 40c 42c
Wrought Iron.
In. ¾ 5-16 ⅜ ½ ⅝ ¾ to 1
Per lb ... 9c 8c 6½c 5½c 5c 4½c
Wrought Steel.
In. ¾ 5-16 ⅜ ½ ⅝ ¾ to 1
Per lb .10c 9c 7½c 6½c 6c 5½c

WEDGES.

Axe ..... per doz. ... 30c
Galling ..... per lb. .. 10½c
Saw ..... " .. 8½c
Wood Choppers.
Lake Superior and Oregon, Pat ..... per lb. .. 9½c
Reg. Pattern, Steel ... " .. 4 c
Truckee " " " .. 4½c

WEIGHTS.

Hitching ..... per lb. .. 2½c
Sash—F. O. B. Chicago .. pr ton .. $27.00

WHEEL BARROWS.

Common Railroad ..... per doz. $16 00
Heavy " " " .. 19 50
Railroad, ball bearing " .. 19 00
Santiago Steel Tray .. " .. 25 50
No. 04 Steel Dirt ... " .. 32 00
No. 04½ " " " .. 36 00

WHEELS.

Corundum ..... 70&10&5
Emery ..... 75&5%
Well. In. 8 10 12 14
Per doz. $1.90 $2.20 $3.00 $5.50

WIRE.

Barbed. Painted. Galv'd.
Carloads ... pr 100 lbs .. $2.50 $2.80
Less than car " .. 2.60 3.90
Brass.
In coils 20%
In 1 lb. spools, new list ..... 50&10%
Broom—Tinned ..... 60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils ..... 20&10%@25½%
In 1 lb. spools, new list ..... 50&10%
Fence—Smooth.
Nos. 6 to 9, Annealed, pr 100 lbs. $2.10
Nos. 6 to 9, Galv'd ... " 2.30
Hair—New list ..... 50&10%
Market.
Bright, full bdles ..... 70&10%
Bright, broken bdles 70%
Coppered, full bdles 70%
Coppered, broken bdles ..... 65&10%
Tinned, full bdles ..... 70&5%
Tinned, broken bdles ..... 65&10%
Picture.
In coils ..... 80%@80&10%
In 5 lb. spools ..... per lb .. 26c
Plain—Small lots $2.00
Car lots 1.95
Small spools 5c per hundred higher

WRENCHES.

Acme Standard 60%
Alligator ..... 65&5%
Always Ready ..... 40&10&5%
Bemis & Call 40%
Coe's Standard ..... 40&10%
Girard's Agricultural 75%
P. S. & W. Co.'s Agricultural 75%
" " Knife H'dle .. 50&5%
Wescott's "S" 33⅓%
Malleable ..... per lb .. 6½c
Stillson Pipe ..... 60&5%
Trimo " 60%

WRINGERS.

Clothes.
Nos. 22&110, Guarantee, pr doz. $28 00
No. 150, Sunshine ..... " 18 00
No. 130, Mendota ..... " 18 00
No. 12, Success ..... " 16 00
Blue Bell, Ball Bear'g. " 35 00
No. D 110, Domestic ... " 22 50
No. E 800, Empress ... " 25 50
No. 122, Bicycle Ball-bearing ..... " 27 00
No. 132, Swan ..... " 27 00

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS HUBERT E. PECK, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications." Honest work but no "Something for Nothing" offers.

Hardware Stock for Sale—Best location on the North Side; four street car lines intersect. Reason for selling have other business. Address "Other Business," care The American Artisan, 69 Dearborn street, Chicago, Ill. 9

I want to buy a stock of hardware, furniture and undertaking business if I can put in part pay good Eastern Nebraska lands (unimproved) that are fast advancing in value. I will deal for a stock from $6,000 to $10,000 and buildings. Address Box 148, Greely, Neb. 9

For Sale—Stock of hardware and fixtures; invoice about $6,700.00. Excellent location; good business; must sell on account of sickness. Address Guild Hardware Co., Watseka, Ill. 8

For Sale—For cash; $6,000 stock of hardware, stoves and paint, with a tin and plumbing shop in connection; this stock is located in northeastern part of Iowa in a good farming country. Address "Paint," care of The American Artisan, 69 Dearborn st., Chicago, Ill. 8

For Trade—Land owner will exchange good North Dakota land for hardware stock. Write for particulars. H. A. Ebert, Alden, Minn. 8

For Sale—$4,500 hardware and plumbing business, located in a prosperous town in San Joaquin Valley, California. For particulars address, J. S. V., care Geo. H. Tay Co., San Francisco, Cal. 8

For Sale—Clean hardware stock, with or without building, in a lively town of about 2,500 inhabitants, in northern Wisconsin; good reasons for selling. For particulars address Paul Schulz, Medford, Wis. 7

For Sale—A nice clean stock of hardware and furniture; invoice about $4,000; county seat town in center of best farming community in State. Address F. Matoushek, Butte, Neb. 7

Wanted—In northern county seat or manufacturing town, stock of hardware and furniture; must be a clean, up-to-date stock; we want to exchange an Iowa 160-acre improved farm located in celebrated Hiteman coal district, Monroe county, or income property in live town paying 10 per cent on $10,000; would consider residence property if desirable. Address "Property," care The American Artisan, 69 Dearborn st., Chicago. 7

Tin, sheet iron and furnace business for sale cheap if taken at once. Paul M. Fink, 792 Van Buren st., Chicago. 7

Partner wanted to take an interest in a well-established hardware store; present stock $10,000; too much for one man to look after. For particulars address 115 West 11th st., Erie, Pa.

Want to purchase good hardware store or hardware and furnace store; must be a good business location; business propositions only need be offered. Address T. P. Daniel, care F. G. Wood, Salt Lake City, Utah. 7

Wanted—Good stock of hardware or farm implements in Indiana or Illinois for a good Illinois farm of 160 acres. Write for particulars. Address X, care The American Artisan, 69 Dearborn st., Chicago, Ill. 7

For Sale—At once, a well-established tin and furnace business in an up-to-date town of 2,000 population in northeastern Kansas; good location, cheap rent; good reason for selling; if you are looking for a snap investigate at once. For particulars address "Bargain," care of The American Artisan, 69 Dearborn st., Chicago, Ill. 7

For Sale—Good hardware, furniture and undertaking business, store building and residence also. Address Box 163, Plymouth, Neb. 6

Wanted—Second-hand slate machine in good condition; must be cheap. J. A. Bucklew, Warsaw, O. 6

For Sale—A clean hardware and implement stock; will sell either hardware or implements or both, with buildings or without. The only hardware implement store in town of 500 inhabitants. Good reason for selling. Address "Will Sell," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 6

Ohio farm to exchange for country hardware; $2,500. G. B. Allion, Swanton, Ohio. 5

2,000 lbs. S. & D. standard twine for sale free on board cars of either of the following roads: C., M. & St. P., C., N. W. Ry., I. C. R. R., at 11c cash. J. H. Alpinger, Kingston, Ill. 5

For Sale—$3,500 stock of hardware store and tinware, tinners' tools and tinners' stock; situated in good town of 1,200 inhabitants; good reason for selling. Address "Box 103," care American Artisan, 69 Dearborn street, Chicago, Ill. 5

TINNERS' TOOLS.

For Sale—One Peck, Stowe & Wilcox squaring shears in fairly good condition. Will sell cheap. New blades. C. A. Peck Hardware Co., Berlin, Wis. 9

Wanted—To buy a 30-inch or larger gap square in first-class condition, or an 8-foot square shear. Address Box 316, Chillicothe, Ill. 8

For Sale—Tinner's tools in first-class condition; 50 to 60 per cent. off list. Address Box 316, Chillicothe, Ill. 8

For Sale—Stow's No. 01 brass mounted 20-inch groover, $6.00; Stow's No. 4 beading machine, encased and standard, 6-in. arm, $9.00. C. F. Troeller, Larrabee, Ia. 8

Wanted—A set of tinner's tools; must be cheap for cash. Henry Field, Hope, N. D. 7

Wanted—Second-hand machines in good condition, 1 pair squaring shears, several rollers, a folder, a setting-down machine, a burring machine and a turning machine. Address "Shears," care of The American Artisan, 69 Dearborn st., Chicago, Ill. 7

For Sale—Set of tinner's tools in good condition, bought new five years ago; a bargain. J. A. Bucklew, Warsaw, O. 6

HELP WANTED.

Wanted—At once, a good all-around tinner, can give steady work; must be sober and reliable; state wages. F. L. Ray, Darlington, Wis. 9

Wanted—At once, an all-around tinner, one with some knowledge of plumbing preferred; married man desired; must be strictly sober. Steady work the year round. Williams & Ripley Hdw. Co., Winchester, Ind. 9

Wanted—A tinner. We want a first-class man familiar with general job work to whom we will pay good wages and give steady employment the year round. Address "Year," care The American Artisan, 69 Dearborn street, Chicago, Ill. 9

Wanted—At once, a tinner, must be a strictly first-class mechanic and thoroughly understand hot air heating; no other need apply. To such a man I can give a permanent position at $75.00 per month. Give age. Address E. C. Dedrick, Langdon, N. D. 9

Wanted—Tinsmith, first-class, must be good on furnace work. Address Eugene Flagler, Dwight, Ill. 9

Good tinners wanted. Mohr-Jones Hdw. Co., 315 Sixth street, Racine, Wis. 9

Wanted—At once, a good second tinner who can do roofing, guttering and some bicycle repairing if necessary. This will be a permanent place for a good man. Fargo Hardware Co., Fargo, N. D. 9

Wanted—Tinners and helpers; no basement shop. Martin Engelhart, 473 Lincoln ave., Chicago. 8

Wanted—Four first-class cornice and furnace men; 35 cents per hour to the right men. Raymond & Bailey, Mason City, Iowa. 8

Wanted—Two good tinners for furnace work. Steady work to good, sober men. The Rollyn Hawkins Co., Indianapolis. 8

Wanted—Experienced hustling store salesman for city and country; good line. Address Hustling Salesman, care American Artisan, 69 Dearborn st., Chicago, Ill. 8

Wanted—At once, clerk in stove and tin store. State experience and wages wanted. Address, F. B. Karl, Delaware, Ohio.

Wanted—Two of three good cornice makers; steady work. Henry Weyand, Waterbury, Conn. 8

Wanted—Nickel plater. A first-class boss nickel plater and polisher is open for an engagement; wages reasonable and first-class references. Address ABC, care The American Artisan, 69 Dearborn st., Chicago, Ill. 7

Wanted—A good tinner who can also do plumbing and furnace work; fully capable to do such work as generally comes in, in a town of 1,500 people. State wages and address C. J. Johnson, Dell Rapids, South Dakota. 7

Wanted—A first-class tinner on all kinds of job work. Call or address at once, 96 Plummer ave., Hammond, Ind. 7

Wanted—Good hardware and stove man, one who understands sewing machines preferred; state salary wanted. Address John Stoelzle, Murphysboro, Ill. 7

Wanted—Good all round tinner and furnace man to run my shop; the right man can share in the profits. Write or call for two weeks, 7105 So. Chicago ave., Chicago, Ill. 7

Wanted—At once, tinners, slaters and sheet metal workers; steady work to right ones. Bailey & Keeley, Newark, Ohio. 7

Wanted—An experienced tinner and furnace worker; must be reliable and able to go ahead with work; permanent job for the right party. Address Gemke Bros. & Busch, Delphos, O. 7

Wanted—One first-class all around tinner; state wages wanted. Steady work. Must be able to come at once. Hoerssel Hardware Co., Racine, Wis. 6

Wanted—At once, a good steady, reliable tinner, for inside and outside work and furnace work, and some plumbing; state wages wanted and experience. Can give steady work all the year. J. H. Ford, Dodgeville, Wis. 6

Wanted—A first-class stove pattern fitter. The Wehrle Co., Newark, O. 6

Wanted—25 first-class cornice and sheet metal workers. Apply to St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn. 6

Wanted—Foreman for nickel plating room and also stove mounters. Address "Foreman," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 6

Wanted—At once, a good steady tinner; one who is acquainted with furnace and blow-pipe work and both inside and outside work. Escanaba Hardware Co., Escanaba, Mich. 6

Tinner Wanted—Sober, steady and experienced man, for a country shop; furnace work and some knowledge of plumbing required; steady work will be given. Southern Minnesota town of 1,200 pop. Address "39," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 6

Reliable tinner and sheet metal worker with $1,000 wants position with view of buying; no objection to honest partner or good farm land if less cash required. Address, giving particulars, "F. W. F.," Box 75, Sterling, Okla. 6

Wanted—Foreman for steel range shop, by large stove and range manufacturing concern. None but first-class, capable men, who can furnish references, need apply. Address, stating age, experience, etc., "Capable," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 6

Wanted—At once, good all-around tinner. Address M. R. O'Neill, wholesale and retail hardware, 67 Broadway, Fargo, N. D. 5

SITUATIONS WANTED.

Wanted—Permanent position with a progressive firm, by a first-class furnace man and tinner; 14 years' experience; strictly temperate; good solicitor. J. G. Wimmer, 404 Queen st., Dubuque, Ia. 8

Position Wanted—German American tinner wants job by October 1st. Am a hustler; 5 years' experience; 27 years old; can do furnace work, clerk in store, etc.; am pleasant and of good habits. Address, H. Ebert, Alden, Minn. 8

Wanted—Position as traveling salesman in Indiana or Illinois for stoves, hardware or kindred lines; will furnish good references, etc. Address Y, care The American Artisan, 69 Dearborn st., Chicago. 7

Wanted—By a first-class tinner and furnace man, a position either in Michigan or South Dakota; best of reference. Write for particulars. F. W. Bates, Erie, Ills. 7

Tinner that has had five years' experience in plumbing and steam fitting would like a steady job with some good firm. W. P. Ferrall, 61 Pine st., Muskegon, Mich. 7

Situation wanted by young man as tinner. Have had 3 years' experience in general tin shop. Have also had experience in plumbing and furnace work. Address Box No. 565, Dodgeville, Wis. 7

Situation wanted by a young married man; aged 27; 10 years' experience in tinning; can do a first-class job of plumbing or hot air heating; also good at general repair work; would like permanent job in town of 5,000 or larger; can furnish best of references; when writing please state wages. Address K. C., care of The American Artisan, 69 Dearborn st., Chicago, Ill. 7

Wanted—Position as salesman on road, jobbing and large trade preferred; have had twenty years' experience in gas, gasolene and general line of stoves; am also posted on hardware or hardware specialities; had charge of branch house in Chicago for a number of years; reasons for wanting position, sold out my retail business. Address "Traveler," Box 53, Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 6

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We have two patented articles made of galvanized iron, which can be made in any tinshop, for which there is good demand everywhere, and in which there is good profit. Retails from 75c up to $50, according to size made. Good job for side line in shop to keep tinners busy at odd times. We lease Rights to build on small Royalty. For particulars address

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Calling on Stove and Hardware Merchants in each state and territory can secure a fast selling specialty on which a good commission is paid, by addressing the

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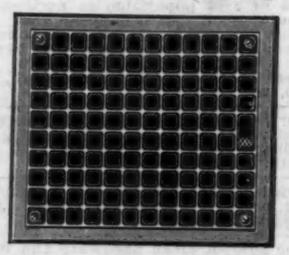

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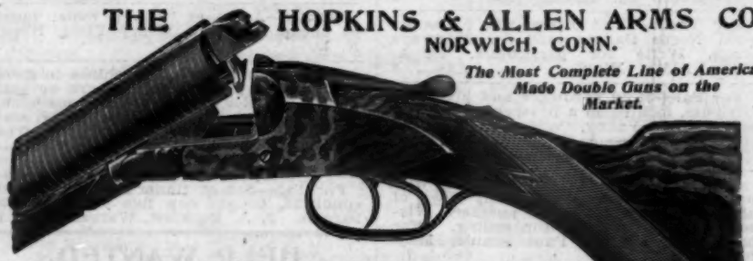

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THE AMERICAN ARTISAN FULL SIZE PATTERNS

Comprise patterns for a full line of tinware, in numerous sizes, square and round elbows, cut-offs, etc. These full-size patterns, numbering upward 100, are printed on manilla paper, from which they are readily transferred to heavy sheets and cut out ready for use. The list contains the following patterns:

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No. 1 Coffee Boiler.
No. 2 Coffee Boiler
No. 3 Coffee Boiler
Lamp Filler
One-pint Dipper
One-quart Dipper
Two-quart Dipper
Four-quart Flaring Pail
Six-quart Flaring Pail
Eight-quart Flaring Pail
Ten-quart Flaring Pail
Twelve-quart Flaring Pail
Fourteen-quart Flaring Pail
Ten-quart Dish Pan
Twelve-quart Dish Pan
Fourteen-quart Dish Pan
Sixteen-quart Dish Pan
Dinner Bucket
Five-inch T-Joint
Six-inch T-Joint
Eave Trough Mitre Joint
"Snap" 2-inch Conductor Elbow
Cullender
Two-inch Square Elbow
Two-and-a-half-inch Square Elbow
Three-and-a-half-inch Square Elbow
Four-and-a-half-inch Square Elbow
Five-and-a-half-inch Square Elbow
Six-and-a-half-inch Square Elbow
Seven-and-a-half-inch Square Elbow
One-pint Funnel
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Three-pint Funnel
Four-pint Funnel
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Three-inch Four-Piece Round Elbow
Four-inch Four-Piece Round Elbow
Five-inch Four-Piece Round Elbow
Five-and-a-half-inch Round Elbow
Six-and-a-half-inch Round Elbow
Seven-and-a-half-inch Round Elbow
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Apple Corer
Oval Foot Bath
Oval Pudding Pan
Half-gallon Can Breast
One-gallon Can Breast
Two-gallon Can Breast
Three-gallon Can Breast
Half-pint Measure
One-pint Measure
One-quart Measure
Half-gallon Measure
One-pint Basin
Two-pint Basin
Three-pint Basin
Four-pint Pan
Six-quart Pan
Ten-quart Pan
Small Cake Pan
Medium Cake Pan
Large Cake Pan
Small Wash Basin
Large Wash Basin
Sprinkler Breast
Four-gallon Churn
Five-gallon Churn
Small Dust Pan
Large Dust Pan
Five Sizes Funnel Patterns
Oval Dinner Bucket
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FULL SET OF 100 PATTERNS $1.00.

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Stove Rods, Paste, Stove Putty.
Stove Knobs, Pipe Dampers, Mica, Etc.

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FURNACE PIPE DAMPER.

The handle is enameled wood, will not heat, rigidly clamped and cannot come off. The spring is not affected by heat. The stem is a steel rod, all one piece and nothing to fall apart; pointed and easily driven through the pipe. The Damper Plate is made of cold rolled pickled steel, corrugated to stiffen it and to prevent warping. We call special attention to lightness and strength of these Dampers and their desirability for **FURNACE** pipes.

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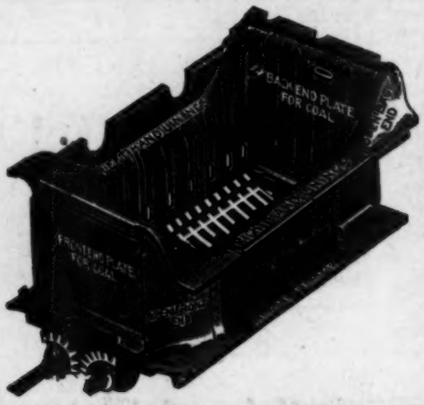

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Repairs for all Stoves and Ranges.
Adjustable Stove Repairs a Specialty.

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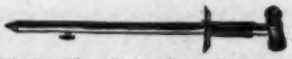

It is impossible for this rod when in position to move either way.

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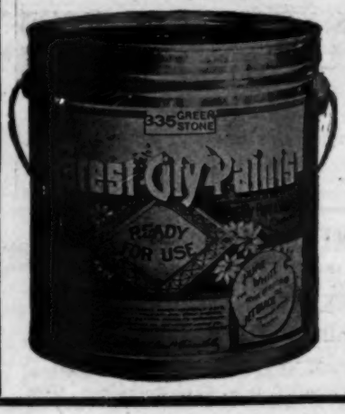

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Should be in every high class dealers stock.

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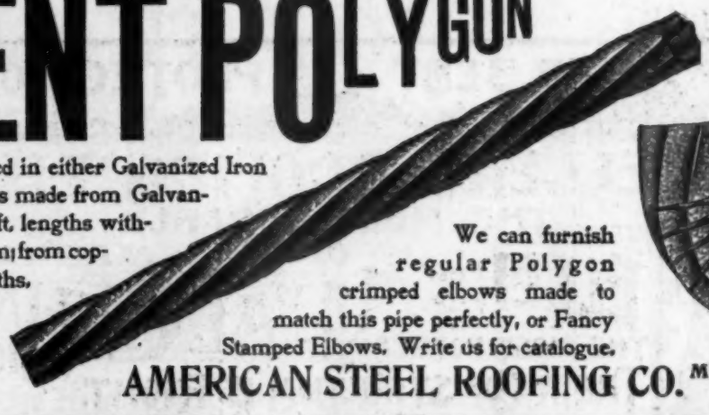
Can be furnished in either Galvanized Iron or Copper. It is made from Galvanized Iron in 10-ft. lengths without a cross seam; from copper in 8-ft. lengths.



We can furnish regular Polygon crimped elbows made to match this pipe perfectly, or Fancy Stamped Elbows. Write us for catalogue.

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EAVES TROUGH, CONDUCTOR PIPE

Our make of goods the very best.

Send us your spring order.

Prices the very lowest

Prompt Shipments.

ELBOWS, MITRES, HANGERS, CUT OFFS, ROOFING AND SIDING MATERIAL.

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Made of Galvanized Iron in Ten-Foot Lengths without a Cross Seam. Will not burst when full of ice.

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Conductor Pipe, (Round or Square)
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Made in sizes to form 10 gauge and lighter. Cost only half as much as CAST IRON. It will take cast iron of three times its weight to equal it in strength.

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WILL NOT WARP LIKE WOOD.

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ELLER'S ROOFING TIN
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ELLER'S METAL CEILINGS
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THEIR CONSTRUCTION IS RIGHT,
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SPECIALTIES:
CORNICE, SKYLIGHTS, VENTILATORS ETC.

J. H. ELLER & CO. 1106 E. 5 STR. CANTON, OHIO

Why

not take Canton Metal Ceilings in your business as a side line? They will immediately become a source of profit and in time may become your main line. Easy to put up "because the construction is right." Made in a series of beautiful classified designs. Our art metal catolog is yours. Write for it.

The Canton Steel Roofing Co.,
CANTON, OHIO
New York Office:
157
W. 23d
St.

Nature planned the camel for endurance, and without that quality it would be a useless animal.
The same quality makes
OSBORN'S GUARANTEED
OLD STYLE
Roofing Plate the standard of merit. It will outwear any other roofing plate made. It is richly coated by the hand dipped process, and is absolutely even and uniform. The coating is not heavier at the drip edge of the plate than elsewhere, but is distributed with perfect evenness. There are no wasters sold under this brand.
THE J. M. & L. A. OSBORN CO.
CLEVELAND, OHIO

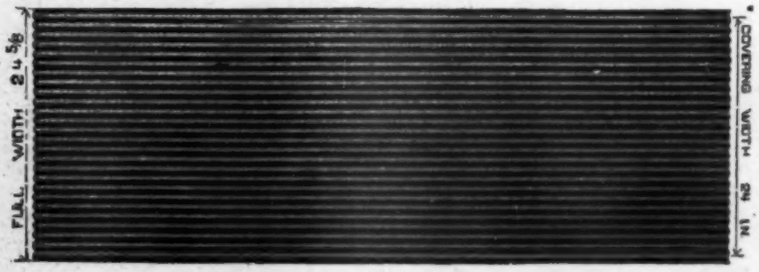
SHEET METAL ARCHITECTURAL ORNAMENTS, STATUARY, ETC.

ART METAL CEILINGS
Roofing, Corrugated Iron, Galvanized Iron, Corrugated Conductor Pipe, Finials, Weather Vanes, Cresting, Etc., Sheet Copper :: ::

GALVANIZED STEEL TANKS FOR ALL PURPOSES.

FRIEDLEY & VOSHARDT, SEND FOR CATALOGUE A21
194-202 Mather St., CHICAGO, ILL.

WE WANT YOU



To please bear in mind that WE ARE HEADQUARTERS ON

Black and Galvanized Sheets,

Steel Roofing and Siding of All Kinds and Gauges,

Tin Plate, Solder, Etc.

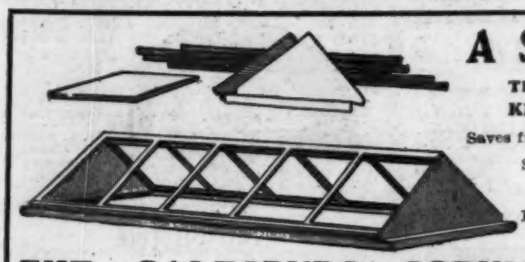
Metal Ceilings, Eave Trough, Conductor Pipe, Hangers.

Write for Prices. PROMPT ATTENTION. **Efficient Service.**

THE BERGER MANUFACTURING CO.

NEW YORK OFFICE: 210 E. 23d Street, New York, N. Y.
PHILADELPHIA OFFICE: 1215 Filbert Street, Philadelphia, Pa.
NEW ENGLAND BRANCH: 176 Federal Street, Boston, Mass.
WESTERN BRANCH: 623 So. Main Street, St. Louis, Mo.

Canton, Ohio.



A SKYLIGHT

That can be Shipped KNOCKED DOWN..

Saves freight, saves cost of crating.

Saves troublesome repairs, and is guaranteed in every respect.

Let us send you our **Sky-light Booklet** and quote prices.

THE GALESBURG CORNICE WORKS,
GALESBURG, ILLINOIS.

YOUNG'S COMBINATION

STRAINER AND CUT-OFF

Body in one piece; cannot break in two.
No levers or springs to break off.
A strainer perfect in construction which ejects all refuse.
All parts riveted and soldered.
Is practically indestructible.
Sold by all jobbers.

YOUNG MFG. CO., Bellevue, Iowa

Edwin B. Stimpson & Son
31 SPRUCE ST. N. Y.
PERFORATORS OF SHEET METALS.

PERFORATED METAL
THE ROBT. AITCHISON PERFORATED METAL CO.
303-305 DEARBORN STREET, CHICAGO, ILL.

BERGER'S { GUTTER HANGERS

Are the Strongest, Neatest and Handiest made

Many styles to suit any building. The Royal Circle shown herewith is an improvement on the old Gem Circle. Send for free samples.

BERGER BROS. CO.

OFFICE AND STORE, 237 Arch Street
WAREROOMS, 100-02-04 Bread Street
FACTORY, 3114-16-18-20 N. 17th Street

PHILADELPHIA

Compartment Sleepers
Standard Open Sleepers
Palace Parlor Cars
Table d'hote Diners
Luxurious Day Coaches

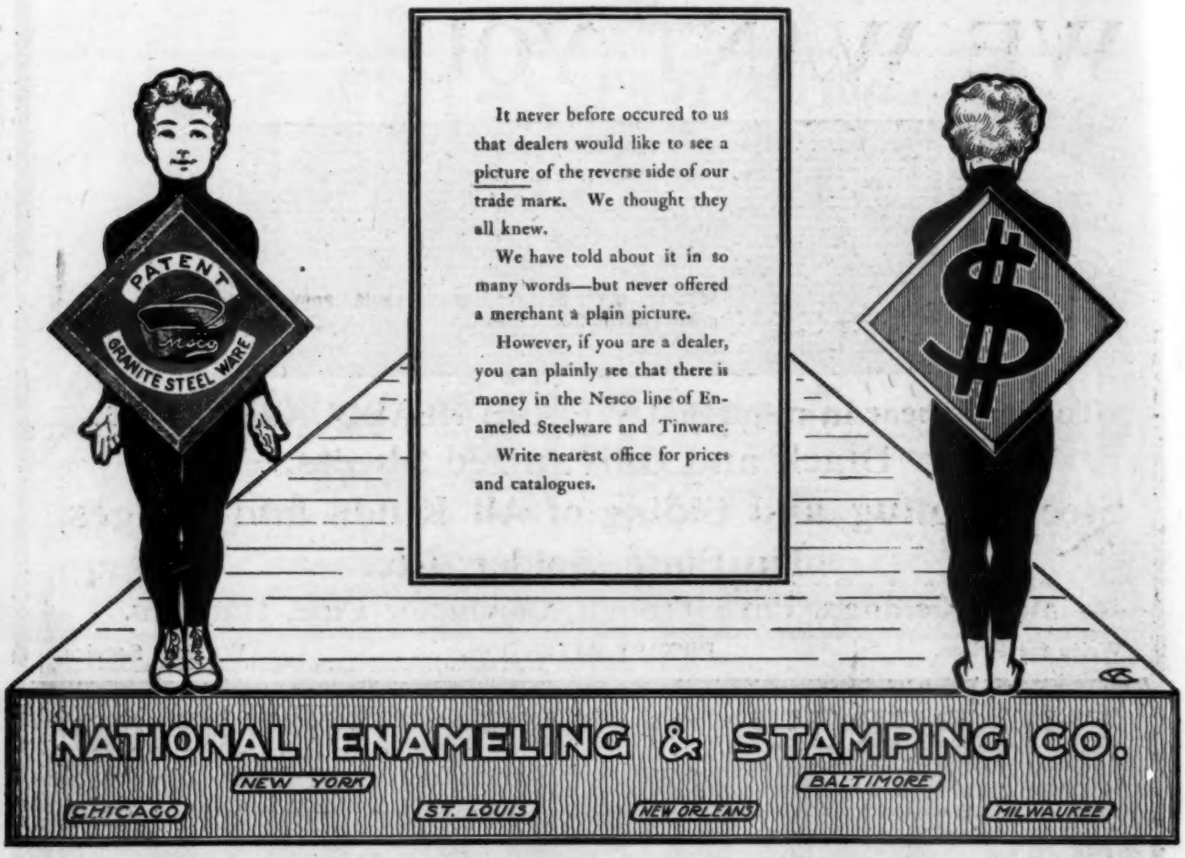
Are some of the many features of a trip over the

Big Four Route

CHICAGO to INDIANAPOLIS and CINCINNATI

Ask for Tickets via the "Big Four."

J. C. TUCKER, G. N. A.
238 Clark St., Chicago



It never before occured to us that dealers would like to see a picture of the reverse side of our trade mark. We thought they all knew.

We have told about it in so many words—but never offered a merchant a plain picture.

However, if you are a dealer, you can plainly see that there is money in the Nesco line of Enameled Steelware and Tinware.

Write nearest office for prices and catalogues.

MORRILL'S MORAL

THE SCIENCE OF SETTING A SAW "JUST RIGHT" WITHOUT ANY DANGER OF BREAKING THE TEETH IS THE ESSENTIAL REQUIREMENT OF A PERFECT SAW SET. . . . . MORRILL'S No. 95 SAW SET IS ACKNOWLEDGED TO BE THE ONLY SCIENTIFIC ONE MADE. . . . . WRITE FOR DESCRIPTIVE CATALOGUE TO

CHAS. MORRILL

BROADWAY AND CHAMBERS ST. NEW YORK

FRED HOEHN
Maker of
MRS. POTTS' SAD IRON HANDLES
Clifton Park, O.
W. L. HARVEY
Agent
40 Dearborn St.
CHICAGO.

How does this strike you for

VACATION

4 Days Lake Trip $13
Chicago to Escanaba, Mich. and Return.

7 Days Lake Trip $25
Chicago to Mackinac Island and Return.

MEALS AND BERTH INCLUDED.

Muskegon or Grand Haven $2.75
and return from Chicago

GOODRICH LINE STEAMERS

Write about it.
R. C. DAVIS, G. P. A.
Chicago, Ill.

GENUINE

Hunter's Sifters

We are the sole manufacturers and there is no other Sifter made that has the reputation or is any comparison to the Genuine Hunter's.

The only Sifter with a loose cap on the handle, so as to clean out the flour that accumulates in it while the Sifter is in use.

THE BEST IN THE WORLD

Combined Mixer, Scoop, Measure, Dredger, Rice Washer, Pumpkin, Tomato, Wine, Starch and Fruit Strainer.

The Fred J. Meyers Mfg. Co.,
HAMILTON, OHIO.

The Paragon Cylinder Washer

"Paragon" defined means "a model of excellence." That is why we call our washer "Paragon" and because it is superior to all others

The "PARAGON" has a revolving cylinder inside the tub, operating on the same principle as all laundry machines. The tub and all parts coming in contact with water are galvanized steel, which eliminates the possibilities of the tub ever leaking, a condition which is very exasperating to users of the wooden tub washers so generally used. There are no heavy gearings to get out of order. It can be operated by a seven-year-old child. It will wash **12** shirts or their equivalent in **15** minutes.

We will ship to any responsible dealer answering this advertisement one of the "Paragon" Washers on 60 Days' Trial, same to be returned to us at our expense if not found practical.

PRICE TO THE DEALER, $5.00 EACH, F. O. B. CHICAGO.

J. M. GAGAN & CO. Hardware Manufacturers **270 to 280 Dearborn St. Chicago**

UNION BRICK HANDLER

A Money Saver.

Full size sample.

Delivered-Express

$3.50

Union Brick Bond Co., PITTSBURG, PA.

The Brilliant Gas Lamp

Should be in every store, home and farm house in America. They don't cost much to start with; are better, and can be run for ½ the expense of kerosene, electricity or gas.

Gives 100 Candle Power Gas Light At Less Than 15 Cents a Month.

Safe as a candle; can be used anywhere by any one. Over 100,000 in daily use during the last five years, and are all good.

100 CANDLE POWER

Write for Catalog.

BRILLIANT GAS LAMP CO.
42 State St., Chicago, Ill.

LIGHTING PROBLEM SOLVED BY CARTER'S CELLULAR ACETYLENE GAS SYSTEM
SAFE SIMPLE ECONOMICAL
WRITE AND ASK ABOUT IT
NIAGARA FALLS ACETYLENE GAS GENERATOR COMPANY, NIAGARA FALLS, N.Y.

PELOUZE SCALES

ARE THE STANDARD FOR
ACCURACY, DURABILITY & SUPERIOR WORKMANSHIP
BUY OF YOUR JOBBER. INSIST UPON GETTING THE PELOUZE MAKE.
Nº E 90 AS SHOWN 24 Lbs.
Nº T 90 WITH TIN SCOOP.
Nº 92½ BRASS DIAL, TILE TOP.
PELOUZE SCALE & MFG. CO.
CATALOGUE, 35 STYLES. CHICAGO.

Free for 30 days

In order to convince you of the merits of the **WONDERFUL DORAN LIGHT**, we are making the following liberal 30-day offer. We appreciate the fact that all the talk in the world would not convince you as quickly and as surely as a 30-day trial of this perfect store light. It is THE light of the 20th Century—by far the most powerful and economical. Give it a 30-day trial and then send us the money o the outfit, just as you prefer. Write for our handsome 48-page catalogue.
ACORN BRASS MANUFACTURING CO.
57 N. Green St., CHICAGO, ILL.

NEW TRAIN SERVICE TO FRENCH LICK AND WEST BADEN SPRINGS

MONON ROUTE
CHICAGO, INDIANAPOLIS & LOUISVILLE RAILWAY

A parlor and dining car now leaves Chicago at 12:00 o'clock noon, arrives at the Springs at 8:45 P. M. Leaves Springs 9:00 A. M., arrives at Chicago 5:55 P. M. Reservations at Monon Route City Ticket Office, 232 Clark Street.

Telephone Harrison 1245.

American Family Scale

BEST IN THE WORLD.

It is made of STEEL, TIN or BRASS Sooop Top.

A most beautiful and attractive scale for all purposes. Beautifully enameled, ornamented and striped. Weighs 20 pounds by ounces. Occupies but little space. Is light and easily moved. It can be regulated by turning the brass screw on top. It is always ready and easily understood. It is a convenient scale to use, and has no weights that may be lost. You can look this one in the face to prove its accuracy without looking for weights. Every scale examined before leaving the factory and warranted correct.

MANUFACTURED BY
AMERICAN CUTLERY CO.
CHICAGO, ILLINOIS.

IT BEATS 'EM ALL.
TRINER'S
Improved Automatic

Universal Family Scale

Investigate its many superior points and you will handle NO OTHER.

TRINER SCALE & MFG. COMPANY
128-130 South Clinton Street,
CHICAGO, - U. S. A.

"Nothing except the mint can make money without advertising."—Gladstone.

Snow Shovels and Furnace Scoops

Place your orders early so you will get your Goods in time.
We make 6 styles, both Long and D handles.
We use only the best grade of Shovel Steel,

Write for our 4-page Circular.

F. E. KOHLER & CO. The HARDWARE SPECIATIES Manufacturers, CANTON, OHIO, U. S. A.

TACKS

TOWER M'F'G. CO.
ELM & FRONT STS.
CINCINNATI, O.
MANUFACTURERS

Special Wash Boilers
IXXX

Sizes 11x20½ and 12x22½.

The Boilers that bring you trade and help you keep it. Made with flat bottom. **Guaranteed full weight, 16 oz. Copper Bottom.** Royal handles and pieced cover. Catalogue and Prices on application. —We have no traveling representatives— Buy direct and the result is that you receive the **best of good goods** at lowest prices.

STUBER & KUCK
Manufacturers of Pieced Tinware and Specialties.
PEORIA, ILL.

O-RIB-O

WARE
BRISCOE MFG. Co.
DETROIT.

..THE HORIGAN WATER WORKS..

The following questions are frequently asked:

What are the Horigan Water Works?

It is a system of furnishing residences, suburban homes, and other buildings with a supply of pure water from your own well or cistern, by Air Compression.

Can you draw water from faucets the same as from City Water Works?

Yes.

Can I have a hot water boiler connected to range, so that I can have plenty of hot water, at all times?

You can.

If water was needed in a three-story building, could it be supplied?

Yes, by a slight increase in the pressure.

If a hydrant for lawn sprinkling was wanted, could it be used?

Yes, by simply putting a connection for same on the main supply pipe.

Can I supply the barn with water for stock, buggy washing, etc.?

Yes, by extending the supply pipe from tank to the barn, and using proper faucets.

Can this apparatus be used successfully in case of fire?

Yes, by simply attaching a hose to the hydrant, or to a faucet over the sink, and starting the pump to maintain a high pressure.

Does it effect insurance rates?

It does in some cases as much as twenty-five per cent.

Is the system complicated?

No, the embodiment of simplicity

Where do you place the tank?

In the cellar or basement.

Does it make any difference as to how far from the house the well or cistern is located?

Practically none, with the exception of the additional cost for piping to the well, if distant.

When windmill power is applied, is there not danger of bursting tank and pipes?

No, this is overcome by the application of a Hydraulic Valve, which is so regulated that the water returns to the well or cistern, after the desired pressure has been obtained.

What pressure carried where this system is in use?

From forty to sixty pounds usually; one hundred pounds can be had if required.

How is the dirt or sediment that accumulates in the tank removed?

By removing the cap at the base of the tank, which is provided with handles, and can easily be removed.

Write for Circulars and prices.
Manufactured by
HORIGAN SUPPLY CO., ST. JOSEPH, MO.

UNIVERSAL TOOL.

That combines high quality, utility and low price.
A tool that is in great demand by machinists and farmers.
Can be used as a flat nose plyer, burner plyer, wire cutter, screw driver, pipe grip, wire holder and splicer.

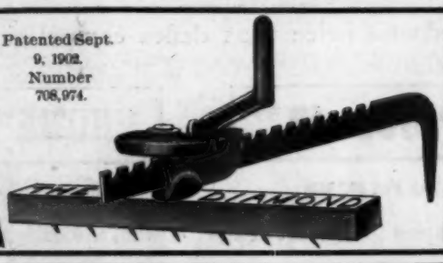
UTICA DROP FORGE & TOOL CO., Mfrs. of Nippers and Plyers,
SMITH & HEMENWAY CO. CORP., Mfrs. of Cutlery and Hardware Specialties,
29 BROADWAY, NEW YORK CITY, NEW YORK

LOOK FOR "NEVER-BREAK" SHOVELS (PATENTED)

You will buy only these, once you know them. They are remarkable for Strength, Leverage and Durability. ("Never-Break" Steel Spiders, Griddles, Kettles, etc., made at the same stand.)

THE AVERY STAMPING CO. CLEVELAND, OHIO.
Makers of "Never-Break" Goods

Patented Sept. 9, 1902. Number 708,974.



THE DIAMOND CARPET STRETCHER

Beware of Infringements. The best Stretcher on the market. Notched bar is steel.
By turning the crank the carpet will be stretched to any tension desired and the **stretcher will hold the carpet in such position wherever the crank is stopped** without the crank being held or fastened. This admits of the free use of both hands by the operator to adjust and tack down the carpet.
We are manufacturers of specialties including the Herbert Wire Stretcher, Herbert Wood Clamp, also **Gas and Gaso'ine Engines**, Stationary, Portable, Marine and Automobile. Write for particulars.

HOLLIDAY MFG. & ENGINEERING CO., 200 S. Clinton St., Chicago

"Yankee" Screw Drivers

NO. 12—RATCHET, With Stub Blade.

No. 11—RATCHET, Right and Left Hand and Rigid.

No. 15—RATCHET, With Finger Turn on Blade.

No. 30—SPIRAL RATCHET, Right and Left Hand and Rigid.

HAVE NO EQUALS.
THEY ARE SOLD BY LEADING JOBBERS.
Send for "Yankee" Tool Book.

North Bros. Mfg. Co., Philadelphia, Pa.

The Excelsior Carpet Stretcher and Tack Hammer Combined

can be used by anyone. None better. Simple, effective, strong and compact.
Inquire of HARDWARE JOBBERS generally, or write
R. W. MONTROSS, Sole Man'fr.
GALIEN, - MICH.

Manufacturer of King Carpet Stretcher, Tack Hammer, Tack Puller, Mincing Knife, Carpet Beater, Clothes Line Holder, Broom Holder, Tea Pot Knobs, Etc.

Sitterly Novelty Works, Auburn, N. Y.

"Eagle" Brand Copper Rivets and Burrs

STANDARD FOR QUALITY. (Lake Superior Copper)
—MANUFACTURED BY—
THE PLUME & ATWOOD MFG. CO.
29 Murray St., NEW YORK 196 Lake St., CHICAGO, ILL.

PATENTS

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H. B. WILLSON & CO. Patent Attorneys
869 F Street, N. W. WASHINGTON, D. C.

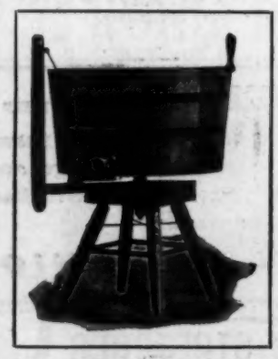
"TRIUMPH" CHAIN HAS TWICE THE STRENGTH OF WELDED.

SEND FOR FREE SAMPLES, TABLE OF TESTS AND ASK QUESTIONS.

THE BRIDGEPORT CHAIN CO., Bridgeport, Conn.

OVER TEN MILES OF CHAIN PER DAY. WE LEAD.

The "HOME" Ball-Bearing Washer



THIS cut shows our "Home" Ball-Bearing Washer as it stands ready for the washing. This washer has but one automatic spring. The wringer, when used to wring out the clothes, is fastened to the tub, and when the washer is operated the wringer must be removed from the tub. The tub is not removable as in the "1900 Junior" and on the "Domestic."

The tub is made of pine and bound with flat steel hoops. The ball-bearings of this machine are the same as in the "Domestic" washer.

The "Home" is offered at a price that defies competition.

"1900" **"DOMESTIC"** **"1900 JR."** **"HOME"**

EACH A WINNER.

We advertise liberally in magazines and refer all inquiries to nearest dealer. Send for Catalogue.

THE 1900 WASHER CO.

BINGHAMTON, N. Y.

OCEAN WAVE WASHER

Once Sold They Never Come Back

EXCLUSIVE AGENCY GRANTED.

Handsome, Well Made and Light Running, Adjustable to High or Low Speed.

Write for particulars.

VOSS BROS. MFG. CO.
DAVENPORT, IOWA.

ARE YOU WITH US? IF NOT, WHY NOT?

3,000
Live Hardware Dealers

Are with us and say the

White Lily Washing Machine

is the best seller on the market.

High Speed, Light Running, Handsome Finish and Guaranteed

Only one dealer in each town can get them. We will do some advertising for you. Write for particulars.

WHITE LILY WASHER CO.
TOLEDO, OHIO. DAVENPORT, IA.
White Lily Washers Wash Lily White.

MINERS' LAMPS

For 30 years we have been manufacturing lamps, and make a Miners' Lamp that always gives satisfaction. The Globe Lamp has a globe. Our name is stamped on it. We also make a Star Miners' and Drivers' Lamp.

GEORGE ANTON,
Post Office Box 64, Monongahela, Pa.

IMPROVED NATURAL STONE GERM PROOF

WATER FILTERS

Prevent Zymotic Diseases by pushing sale of these goods in your locality.

EVERY FILTER IS GUARANTEED TO BE ABSOLUTELY GERM PROOF.

EVERY FILTER IS A PERFECT FILTER WHEN IT LEAVES OUR FACTORY.

Every shipment contains a handsome display card. Price lists and discounts are furnished upon application. Manufacturers of Sanitary Stoneware of every description. Pottery Established 1861.

FULPER POTTERY CO.
FLEMINGTON, N. J.

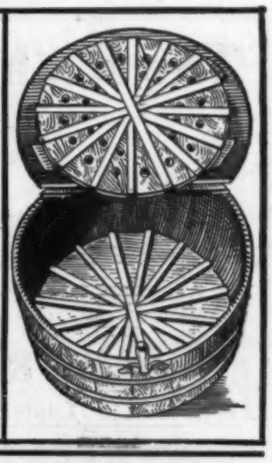
The 1903 WASHER

Best made,
Correct principle,
Perfect washer,
No wear on clothes.

FOR TERMS AND TERRITORY WRITE

The 1903 Washer Co.

ALTOONA, PA.



Any dealer can be master of the trade if he handles our

IMPROVED SCHROEDER ROTARY ROLLER GEARING WASHER.

Has no clutches, springs or trigger to get out of order. Nothing to break, always in gear, runs backward or forward. Made of the best material.

WORKS SO EASILY A CHILD CAN OPERATE IT.

Can't tell you half here, better write for full information. We make one-half dozen styles, all money makers. Ask us.

THE BENBOW-BRAMMER MFG. CO.,
ST. LOUIS, MO.

Perfect Working Model Wrench

Exact Size of Cut.

Ebony, Ivory, Coral or Amber Handle, $2.00 per doz. Pearl or Stone Handle, $3.00 per doz.

Over 2000 LIVE Hardware men sell 'em. The DEAD ones don't.

We will send two dozen prepaid in a handsome plush lined cherry tray to any dealer, **on consignment,** to be returned at our expense if found unsalable. We could not do this if they were not the best selling novelty in the hardware trade. It costs you nothing but a 2c stamp to try them. Drop us a line and we do the rest.

DAVISON MFG. COMPANY
110 Front St. BROOKLYN, N. Y.

Boss Washing Machines

11 Different Styles. 31 Sizes.

Illustration represents our "Uneeda American Round" Washer. For full description write for catalogue showing our complete line. Address

Boss Washing Machine Co.,
Station H, Cincinnati, Ohio.

MAIL ORDER DEPARTMENT

F. L. SHAFER CO. MFRS. ADVERTISING SPECIALTIES
269 DEARBORN ST.
PHONE 680 HARRISON. CHICAGO, U.S.A.

SEND FOR CATALOGUE B.

Do You Know

That the O. K. WASHING MACHINE

is the best made, the lightest running and the most attractive washer on the market? *Are you selling it? If not, why?* Every first-class dealer should sell it, because it is made of the best materials, by the best mechanics that can be obtained, and every one sold will sell another.

Write us for Circulars and Prices.

H. F. BRAMMER MFG. CO. Dept. B. DAVENPORT, IOWA

3 PROFITS

1—For the USER
2—For the MERCHANT
3—For the MAKER

See FAULTLESS RANGE AD, Page 7, this issue.

Little Journeys.

Little Journeys to lake resorts and mountain homes will be more popular this summer than ever. Many have already arranged their summer tours via the Chicago, Milwaukee & St. Paul railway and many more are going to do likewise. Booklets that will help you to plan your vacation trip have just been published, and will be sent on receipt of postage, as follows: "Colorado-California," six cents. "In Lakeland" and "Summer Homes," six cents. "Lakes Okoboji and Spirit Lake," four cents.

F. A. MILLER, General Passenger Agent, Chicago.

The Highest Type of American Cutlery

IS EXEMPLIFIED IN

QUEEN SHEARS

FARWELL, OZMUN, KIRK & CO.,

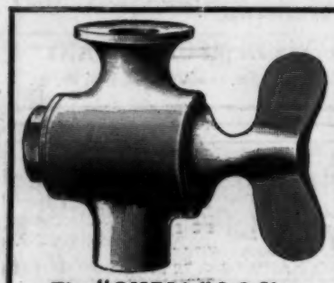
Wholesale Distributers. ST. PAUL, MINN.

"Never-Fail" Oil Cans Are a Safe Investment

We pay CASH for every one of our "Never-Fail" Cans that is returned to you by your customer as unsatisfactory. We ask YOU for the FIRST order, you will ask US for the SECOND. Write to-day.

Your Money Back if Not Satisfactory.

J. A. HARPS MFG CO. - Greenfield, Ohio.



The "OMEGA," 2-3 Size.
To attach to bottom of can.

BEER,
MILK CAN,
OIL CAN,
CREAM SEPARATOR

FAUCETS.

Various Sizes and Styles.

MANUFACTURED BY

CLARK NOVELTY CO.,

ROCHESTER, N. Y.

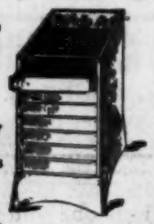
Also Mfrs. of The CLARK Kerosene OilSystem for heating Soldering Coppers.

Improved Farmer's Friend Cream Separator.

The simplest device of its kind on the market. Made of heavy tin plate.

"Model" Fruit Evaporator.

A highly satisfactory Evaporator for family use. Can be used on an ordinary Cook Stove. Hardware dealers wanted as agents. Write for Prices



Blanke & Hauk Supply Co.,

201 and 203 Market St. ST. LOUIS, MO.

SURPRISE CREAM SEPARATOR

A Labor-Saving Device for Taking Care of Milk and Cream.

Made of heavy tin; durable—works thoroughly—does away with crocks, pans and hard work—keeps milk and cream clean; not expensive—not complicated. Made in six sizes; every one guaranteed.

SEITHER-CHERRY CO., Keokuk, Iowa

$3.00 SAVED

TO ALL POINTS EAST AND WEST VIA THE D&B LINE.

"Just Two Boats" BETWEEN DETROIT & BUFFALO

DETROIT & BUFFALO STEAMBOAT CO.

COMMENCING MAY 11TH
Improved Daily Express Service (14 hours) between

DETROIT AND BUFFALO

Leave DETROIT Daily	4.00 P. M.
Arrive at BUFFALO	8.00 A. M.
Leave BUFFALO Daily	5.30 P. M.
Arrive at DETROIT	7.00 A. M.

Connecting with Earliest trains for all points in NEW YORK, EASTERN and NEW ENGLAND STATES. Through tickets sold to all points. Send 2c. for illustrated pamphlet and rates.

Rate between Detroit and Buffalo $2.50 one way, $3.50 round trip. Berths $1.00, $1.50; Staterooms $2.50 each direction. Week end Excursions Buffalo and Niagara Falls.

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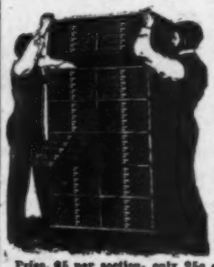

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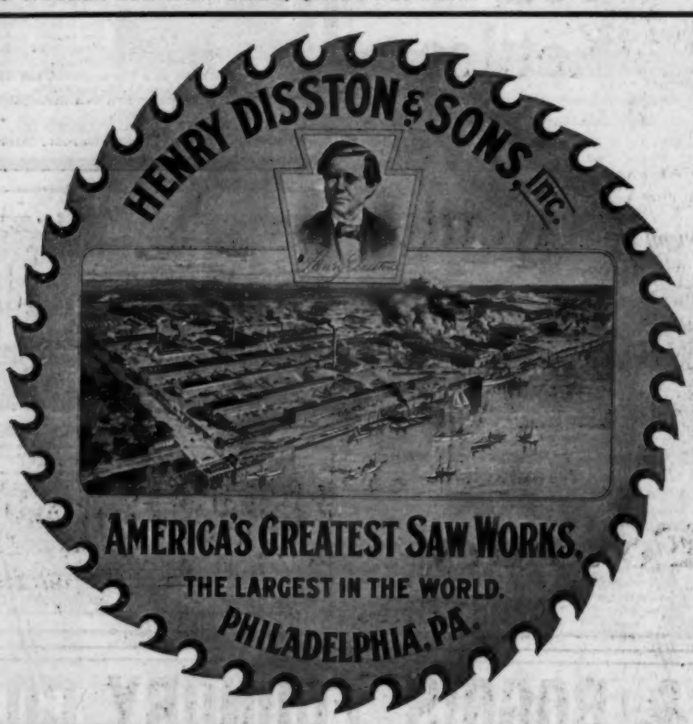

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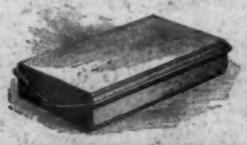

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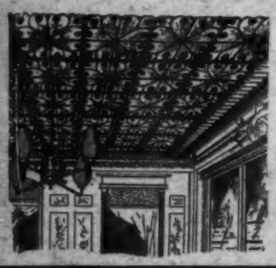

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